



Diploma in _____
Managing Quality in Higher Education

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QUALITY SYSTEM DESIGN AND IMPLEMENTATION

The systems approach to educational quality is based on the premise that customer satisfaction can only be achieved if individual areas of the institution work well individually and collectively. To improve its quality management system, institutions of higher education must skillfully implement the philosophies, tools and techniques of total quality. The quality journey is a process of continual growth and improvement. Achieving total quality, however, will not occur overnight. Mistakes are bound to happen along the way. Organisations which understand their customers, products, employees, markets and processes will have a better chance at achieving their goals as they journey towards quality maturity.

ON EDUCATIONAL LEADERSHIP

It is standard assumption in the quality management literature that leadership is the overriding principle of quality improvement. Without leadership, total implementation of quality at the college or university will not succeed. While quality improvement is everybody's job, it is primarily the top administration's responsibility to keep the process going as they "have the requisite authority, vision, and constancy of purpose to direct the whole organisation at the strategic level".²⁰⁵ According to Deming, managers control 85% of the systems while workers control only 15%.²⁰⁶ Hence, the responsibility for improvement at the college or university rests heavily on the hands of its managers – top administrators, associates in administration, and division and department heads. Quality improvement, however, will not be achieved without the help of all school personnel.

Quality management requires positive change. Leadership is the catalyst to effect and manage such change. The role of leaders at the college or university should then be "one of enabling everyone in the organisation to focus on pleasing the customer".²⁰⁷ They develop work processes, measurements, and goals for the whole institution and inspire everyone to seek quality in all aspects of their work in order to accomplish these goals. It is imperative that administrators show an understanding of the mission, vision, and values of the institution and ensure that others buy into the same mission and vision.

It is important for administrators to understand that management differs from leadership in a number of ways. While the manager is preoccupied with "doing things right," the leader, on the other hand, is involved in "doing the right thing".²⁰⁸ *Right* is defined as those aspects of performance that are essential for competitive success or for accomplishing the organisation's mission.²⁰⁹ "Management is efficiency in climbing the ladder of success; leadership determines whether the ladder is leaning against the right wall".²¹⁰ Whereas management is associated with setting things in their proper places, leadership, on the other hand, is associated with a motivation force pushing or pulling a group or organisation toward its goals. Both management and leadership are needed to effectively and efficiently run an educational institution.

Leadership is needed to introduce the principles of total quality and sustain its practice at the institution because it is leadership that provides people with a picture of what needs to be done to achieve common objectives, and instills the desire to achieve them chiefly by actions rather than by rhetoric. Leadership states what is expected of the college or university, envisions what it will try to do and not do, works to provide the means or resources for the institution, and understands that the knowledge required to operate ideally does not exist because of variations within the system.

To foster trust in the institution, its leaders must model behaviors they want everyone to exhibit. They must strive to create an atmosphere in which excellence will thrive and which stresses not only competencies and skills but also patience, kindness, and mutual respect. A true quality leader would exhibit knowledge, personality, and persuasive power.²¹¹ He or she also possesses deep integrity and a noble character which fosters trust.²¹² Trust in turn leads to collaboration rather than competition. Trust fosters a learning environment where mistakes are tolerated and used as lessons for improvement rather than employed as grounds for immediate expulsion from a group or institution. The key to developing a trusting environment is the leader's unshakeable "fairness" in dealing with issues that are discussed both in public and in private. "Managing resistance with intellectual strength, honesty, and integrity is one of the most essential functions of leadership in a time of upheaval".²¹³

A true quality leader would communicate openly and frequently with those with whom he interacts. His communication would be constructive, truthful, thoughtful, and careful and performed with the highest possible integrity. He would seek to understand the effects of his actions on the rest of the institution. He ensures that he and his team support the best results for the whole institution sometimes even at the expense of his own personal ideals or those of his team. Leadership is not displayed solely by the top leader. It also comes from other members of his team as well as from the rest of the higher educational system thereby developing a division of labour and instilling a sense of ownership. Lewis appropriately sums this up as follows:

*Higher education cannot afford to rest its future in the hands and the heads of only a few good people. Creating a culture of leadership is a way of sharing both the responsibilities and the opportunities of future challenges and will go far in ensuring that higher education will have the human resources needed for shaping its own destiny amid inevitable demands for change.*²¹⁴

Turning a trouble-ridden institution around and capitalising on its strengths require a change in attitudes and behaviours of institutional participants. During such times, leadership of one or a few individuals is not enough. A culture of leadership is needed.²¹⁵ A quality leader would be personally involved in the training and education of himself as well as others in the institution. This would enable him to truly understand the needs of the college/university and get directly involved in carrying out its goals. He would ensure that he does not become a barrier to continuous improvement but rather becomes the first person to remove such barriers so that the institution can best achieve its vision.

The role of the Board of Trustees in the quality process is also very important. The Board must demonstrate total commitment and support for the institutional quality improvement programme. By establishing quality policies, the Board can help to set the stage for new administrative policies and procedures that would enhance the college or university quality process. Through solid education and training, Board members can become champions for quality both in the college or university and in their respective institutions.

In the final analysis, the institution will be ready to begin its quality transformation when administration is willing to give up the old paradigms of management control; replace competition with cooperation; admit that the institution can be built on the empowerment of people and not simply on the basis of rewards and punishments; and encourage creativity, innovation, pride in work, and risk taking, even though along the way failures will sometimes occur.

ON STRATEGIC PLANNING

After the mission of the college or university has been clearly defined and an information system is built around it based on customer needs and expectations, the next step is to translate this preparation into practical reality by defining the institution's short-term and long-term goals and by tying everyone's daily work to these goals. Strategic quality planning begins with a firm commitment and affirmation from the college or university administrators that it will no longer be "business as usual" in the institution. The planning process also requires participation from everyone. Certainly, all will be eager to participate if they understand the gains that will be derived from the total quality approach and the changes that will be required of them. Participation will also be further facilitated if everyone is educated on the principles, methods, and tools of total quality. One who goes through the education process will normally experience growth in knowledge and commitment. It is absolutely essential that everyone is engaged in the quality activities of the institution. Total participation is possible if discussions concerning the strategic quality plan take place within the context of a trusting and open environment where all can express their views without fear of retribution or reprisal especially from those in authority.

Strategic planning establishes goals which must be directly related to the mission statement of the institution. A specific time frame is given for achieving such goal. When strategic plans (what to improve) are done well and linked firmly with the operating or process capabilities (how to improve) of the institution, the results can be astounding. Short-term (1–2 years) and long-term (3 or more years) plans should be clearly connected. The strategic plan must be communicated and deployed with great care. Administrators and board directors should not treat the strategic plan lightly because how they communicate it tells a lot about the depth of their commitment.

Plans must be reviewed on a regular basis to keep up with rapidly changing customer requirements and market conditions. The planning process itself must be periodically reviewed with an eye toward continuous improvement. The strategic quality plan should:

- establish Board and administrative commitment to total quality education and communicate that commitment to the college or university community;
- provide everyone the opportunity to participate voluntarily and understand the need for total quality education;
- create the infrastructure needed to implement quality improvement at all levels of the institution; and
- put in place tools and processes that would enable everyone to participate in and contribute to quality improvement and establish systems for recognising outstanding quality performance by teams and individuals and to provide a continuous cycle of training to assure institutional commitment to quality education.

ON CUSTOMER FOCUS AND SATISFACTION

Obstacles towards building good relationships with institutional stakeholders must be removed. “Satisfied customers would tell three other people; dissatisfied customers would tell seven other people”.²¹⁶ Knowledge of customer requirements and of key quality factors is vital in order for the college or university to remain competitive in the marketplace. Customer satisfaction is the real measure of whether or not the goals of the college or university are being met. It is the culmination of the institution’s quality improvement efforts. It is the single best means to communicate quality. Customer focus and satisfaction hinges on complete understanding of the needs of the institution’s customers and on the methods used for data collection. The most vital step on the road to customer satisfaction is identifying customer requirements. The institution should not rely merely on hunches or hearsay as evidence of satisfaction. Nor should it be tempted into using gossip as basis for data. Instead, it should design an instrument that measures specific criteria and use such instrument to collect data from its customers. Data should not be used for the purpose of blaming or casting blame on anyone. Unless data is used responsibly to resolve problems there is no valid reason for collecting it. In a quality-based institution, complaints are eagerly sought after as golden opportunities to learn and to improve the system. The more high-quality data the institution uses, the clearer its customer portrait will be, the faster it will be able to adapt to changes in the marketplace, and the better it will be in anticipating the needs of its customers. “You can never go too far or say too much in the name of customer satisfaction”.²¹⁷



MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT

Adequate and accurate data and information are necessary to drive quality excellence and improve competitive performance. They are needed to improve the institution's customer focus, services, and internal operations. Collection of adequate and accurate data is necessary to keep the institution moving and improving. The main reason for collecting them is to improve administrative and academic processes and systems. Data are essential for effecting total quality improvement because the latter can never be achieved without the former. Systems and systems management is based on fact rather than intuition.

Every piece of data collected from various institutional stakeholders ought to be carefully analysed and utilised because no one would provide information if it will just be ignored or overlooked. Data have to be analysed and presented in a way that is readily understood by all. All relevant information should be shared with members of the institution so that they too can become winners and partners in change. Information sharing should become an indispensable part of the plan-do-check-act (PDCA) cycle which is crucial to total quality implementation.

When data, statistics, and information are used systematically, they will give the college or university a focus for change. They will allow the institution to plan effectively and make the necessary process changes. The data collection and information analysis then become part of the recurring Plan-Do-Check-Act cycles for the educational institution. The process continues in a never-ending cycle of improvement.

ON MANAGEMENT AND DEVELOPMENT OF HUMAN RESOURCES

The total quality concept stresses the importance of quality in every aspect of an organisation. According to Imai, a business or an organisation consists of three building blocks: hardware, software, and "humanware."²¹⁸ Total quality begins with the "quality of people." Only after the humanware is squarely in place should the hardware and software aspects of the business be considered. The humanware must be managed in a way that optimises the whole organisational system. This poses a great challenge especially at the college or university because while skills can be learned, attitudes are harder to change.

An effective human resource recruitment and utilisation for the college or university will need to address the following areas:

- (a) recruitment of dedicated and qualified personnel;
- (b) total involvement in quality improvement efforts;
- (c) employee education and training;
- (d) recognition and measurement of exceptional performance; and
- (e) morale and well-being of employees. These areas are inter-connected. Recognition, for instance, boosts participation and morale while training facilitates participation.

To encourage campus-wide participation and involvement, the college or university can take the following steps to engage all its workers in a number of ways. First, institute a vigorous programme of education and self-improvement. Education in the principles of quality management is critical to producing quality work. Second, remove barriers that rob people of their right to pride in workmanship. Recognise that everyone wants to do quality work. Provide challenges that would require them to stretch their limits. “When people feel no one cares about their work, pride in workmanship disappears and work becomes drudgery. No one is happy. No one seems to really care, and nothing of quality happens”.²¹⁹ Third, institute a vigorous programme of self-improvement. Leaders especially the top administration should become role models for continuous self-improvement both in their personal and professional lives. Each individual should develop a personal development plan which includes, for example, conference or seminar attendance, subscription to professional magazines, journals, and newspapers, and keeping up with the latest trend in one’s subject matter. Fourth, improve constantly using the principles, methods, and tools of quality until all have achieved a degree of success and are doing quality work.



One very important aspect of human resource utilisation is team-building. Team building is a concept that is almost as important as process improvement. A team is a group of people who are goal centered, interdependent, honest, open, supportive, and empowered.²²⁰ The synergy developed within effective teams in terms of relationship, trust, and support can exceed the original expectations of the team. Certain conditions would be needed in order to maximise team involvement and effectiveness. The college or university must create an ideal environment which fosters cohesive teams. People must feel comfortable, confident, and motivated. The institution must provide a supportive environment built on trust and understanding. The college or university must recognise that there will be differences of opinion. It should encourage risk taking and innovation. Above all, it should establish an effective communication system for the whole institution. Before tackling their respective tasks, self-managed teams should go for intensive training in team building, mission setting, vision setting, and other skills required to enhance the work of the teams.

ON MANAGEMENT OF PROCESS QUALITY

The purpose of process management is to ensure that all important processes of the college or university work together to maximise its effectiveness. Process management “is mostly about the prevention of errors”.²²¹ By process is meant “a method of doing something with all the steps involved”.²²² Managing processes is important because the institution cannot have products or services without them. Without products or services, the institution will not be able to fulfill its mission or achieve its vision. It is process management, championed by the total quality philosophy, which provides the missing link to quality assurance in higher education. The common approaches to assure quality in higher education are accreditation and outcomes assessment. Accreditation primarily focuses on inputs such as faculty qualifications, finances, and facilities without having any significant understanding of the need and expectations of the institution’s customers or stakeholders. Outcomes assessment, on the other hand, focuses on educational outputs or products without providing an adequate basis for identifying problems incurred during the process of providing the product.

Quality management, with its emphasis on process management, provides the link between the accreditation approach and the outcome-assessment approach by providing the basis for obtaining the knowledge and understanding of the relationship between causes and effects.

Effective process management requires institutional personnel who know how to monitor, control, and constantly improve processes by using methods that focus on quality instead of numerical goals and outcomes. The process manager uses scientific methods and quality tools to minimise waste and to solve problems for continuous improvement. Waste is the cost of non-conformance or “all the expenses involved in doing things wrong”.²²³ It is thus extremely important for everyone in the institution to be involved in efforts to do things right because if anything goes wrong in one area, say a department, the adverse effects will be felt by others throughout the whole institution. Doing things right the first time will also keep costs down and increase customer satisfaction.

Lasting and significant change will not occur without direct and active involvement by those in the “front-line” of activity. True reform in the college or university will not happen unless responsibility for learning rests with those most involved – teachers and students. Nothing significant will be produced without the full support of the institutional faculty and staff. The teachers, because of their “front-line” relationships with both students and the community, have very significant roles to play in the quality improvement process. They are the ultimate innovators on campus. In a quality environment, teachers are actively engaged in the decision-making process and are accorded a higher status in the institution. They are provided substantial opportunities for renewal, innovation, and growth. In quality-based institutions of higher learning, educators recognise that those directly involved in the activity are the ones most qualified to suggest ways to improve the system.

ON QUALITY AND OPERATIONAL RESULTS

Quality and operational results are the bottom line. They help the college or university to assess the quality of its academic and administrative systems. If particular systems produce good results, chances are they are good systems. Results also demonstrate that the institution is measuring and tracking its systems. They verify progress toward customer satisfaction. Since the goal of quality management is continuous improvement, the only true way to measure that improvement is by the use of data collected from the institution's internal and external customers before and after changes is made to processes and systems. Data collection will give a more accurate picture of what is working and which systems and processes require improvement. The institution should never lose sight of the importance of feedback from its customers or stakeholders. Feedback based on fact is vital if the institution is to truly embark on a continuous improvement journey. It is only through systematic and factual collection of data that the college or university can truly know whether or not the job is being done right.

DESIGN CONSIDERATIONS FOR IMPLEMENTATION

Lewis and Greene identified three common reasons for failure of policy and programme innovations.²²⁴ They are: programmatic over-expectation, conceptual failure, and implementation failure. Programmatic over-expectation refers to unrealistic expectations about success. This type of failures may be prevented by warning customers to be careful (*caveat emptor*—let the customer beware) or by warning advocates not to promise what they can't deliver. Conceptual failures refer to inaccurate or incomplete understanding of causes and effects and the relationships underlying policies or programmes. Such failures may be avoided by a thorough study of the policy or programme being undertaken. Implementation failures refer to failure to carry out the policy or programme as designed. Such failures may be avoided or minimised by careful understanding of the issues and actions related to actual implementation. According to Tom Peters, quality programs often fail because implementing organisations either have a “system without passion, or passion without a system.”²²⁵

Implementing a quality improvement programme in an educational setting is likely going to be complicated. Although barriers are part of any change, some are intensified in colleges and universities because of the culture, nature, and purpose of higher education. Before undertaking such enormous task, therefore, one is advised to take note of the following admonition from Machiavelli's *The Prince*.

*There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit from the old order, and lukewarm defenders in all those who would profit by the new order.*²²⁶

The college or university needs to understand the unique combination of history, personalities, culture, and systems which exist within it and subsequently adapt the total quality philosophy to its own unique situation. There is no standard “cookbook recipe” for total quality implementation which can be grafted from one organisation to another. The total quality literature is full of techniques, prescriptions, procedures, and models which sometimes contradict each other. The suggested approach in this book is an eclectic one – taking the best out of the different models that exist in the literature and configuring it into a framework that is most applicable to the college or university environment taking into account the different views of the institution’s stakeholders. In this book, the authors propose an eclectic model for designing and implementing a total quality programme at a college or university. The following model is a systematic approach to quality planning and implementation based on functional areas of the Malcolm Baldrige National Quality Award. The general deployment model which provides a framework and guidelines for starting, operating, and sustaining a quality program at the college or university is provided in Table 7.1. It is adapted from Lewis and Smith’s total quality deployment model for higher education.²²⁷



	QUALITY PROGRAMME STAGES		
	STARTING	OPERATING	SUSTAINING
Educational Leadership	Secure commitment from the college/ university top administrators Learn quality values and their applications to the college/ university <ul style="list-style-type: none"> Establish links with other quality-based institutions 	Model quality behaviour to faculty and staff Create quality values and set expectations for the entire institution Apply quality principles in day-to-day management <ul style="list-style-type: none"> Communicate quality values to faculty and staff Communicate quality values to the community 	Integrate quality in all major decisions <ul style="list-style-type: none"> Evaluate and improve effectiveness of personal leadership and involvement Integrate public responsibilities into quality policies and practices
Strategic Planning	Develop plans focusing on operational improvement Set short-term and long-term goals relating to quality improvement Secure commitment for long-range budget to support quality initiatives	Determine and consider key quality factors in planning <ul style="list-style-type: none"> Link all quality improvements together Secure long-term funding for employee learning needs	Implement short-term and long-term plans with solid staff commitment <ul style="list-style-type: none"> Improve the planning process itself through greater use of input from different stakeholders Anticipate public concerns and assess the impact of products and services



	QUALITY PROGRAMME STAGES		
	STARTING	OPERATING	SUSTAINING
Customer Focus	<ul style="list-style-type: none"> Establish a system to collect information on customer requirements and expectation Establish an organised system of maintaining public relations Secure commitment to address principal concerns of customers 	<ul style="list-style-type: none"> Be responsive in solving problems Communicate with customers clearly and simply Track levels of customer satisfaction and dissatisfaction 	<ul style="list-style-type: none"> Establish an on-going process to anticipate future needs Provide customer- contact employees with training in areas like listening and problem solving Delight the customer/ stakeholders constantly



	QUALITY PROGRAMME STAGES		
	STARTING	OPERATING	SUSTAINING
Workforce Focus	<p>Set up goals and identify key indicators for improvement Orient all employees to quality values through introductory programmes.</p> <ul style="list-style-type: none"> Evaluate the need for training based on short-term and long-term strategic goals 	<p>Set up mechanisms to promote employee contributions to quality and operational performance Implement faculty and staff development programs Develop performance, recognition, promotion, compensation, reward, and feedback approaches that support quality goals and plans</p>	<ul style="list-style-type: none"> Establish systems to evaluate the quality of training and relate it to on-the-job performance Encourage employee participation in quality teams and other quality supporting activities <ul style="list-style-type: none"> Track employee satisfaction and well-being in a systematic way
Operations Focus	<p>Take into account customer requirements in the design of products and services</p> <ul style="list-style-type: none"> Understand concepts of process variation and process management 	<ul style="list-style-type: none"> Design quality into curriculum development process Build in mechanism of continuous improvement (PDCA, quality tools) Measure and track quality throughout the production and delivery process 	<ul style="list-style-type: none"> Improve the design process continuously Establish a system to assess the quality of processes and products Translate assessment findings into actions to improve the quality of products/ services, processes, and systems
Results	<ul style="list-style-type: none"> Determine whether key factors that predict customer satisfaction and quality in customer use are improving 	<p>Compare quality levels with competitors, industry averages, industry leaders, and other benchmarks</p> <ul style="list-style-type: none"> Calculate the cost of quality 	<p>Show consistent trends in data collection</p> <ul style="list-style-type: none"> Improve measures of productivity and effectiveness

Table 7.1 Total Quality Deployment Model for Higher Education

A descriptive summary of an action plan for implementing total quality at the college or university is presented in Table 7.2 at the end of the chapter. It is adapted and condensed from Lewis and Smith's action plan for total quality transformation process.²²⁸

It provides a framework upon which a specific plan applicable to the college or university can be designed and developed. The action plan provides extensive guidelines for *what* should be done, *who* should be doing it, *why* this particular action is necessary, *how* the action should be carried out, *when* it should be done, and *what* indicators are required to ensure that it has been implemented. As such, it furnishes a comprehensive guide for initiating a thorough and, hopefully, more effective and productive total quality transformation plan for any institution of higher education. The action plan, however, is not intended to be a rigid short-term scheme but rather as a guideline for implementation which can still be refined to fit the specific needs and circumstances of the institution. Since the quest for quality is never-ending, the institution must eventually develop its own systematic approach to problem solving using the action plan as a core guide in order to perpetually improve its administrative and academic processes. The following sections describe how the deployment model in Table 7.1 and the action plan in Table 7.2 may be applied within the context of higher education.

Educational Leadership

Leadership is probably the most important ingredient in establishing quality at institutions of higher education. To do so would first require total commitment from their administrations and their Boards of Directors. But commitment to the tenets of the total quality philosophy does not come easily. It comes from an understanding that leaders will have to assume different roles in the twenty-first century. To understand this new role, board members and administrators will have to be educated in the principles of quality management. With proper education and training, they will have been armed with the requisite knowledge and skills to model quality behavior to the faculty, staff, and students. This is important because the college or university faculty and staff have often asked that administrators always set an example and model those behaviours they want everybody else in the institution to exhibit. Establishing quality on campus requires that all administrators practice what they preach by applying quality principles in their day-to-day activities and by communicating quality values to the faculty and staff, students, and to the community. For institutions of higher education, leaders are expected to be models in all aspects of institutional life: spiritual, mental and physical. Administrators are expected to be servant-leaders – always willing to serve and minister to the needs of others but at the same time willing to create quality values and expectations for others in the institution.

It is a good idea to hold a special retreat for Board members to learn how to function in the Board, to understand the organisational structure and to find out how the institution can operate more effectively. This dialogue can help strengthen the Board by clarifying its function, role and supervision of the college or university. Such retreat may also include administrators who can serve as valuable resource persons for the Board members. Regular meetings or get-togethers can help to bridge and strengthen communication among the Board members and administrators. One difficulty in accomplishing this would be that many Board members are key people in their respective institutions and may not have much time to spare for special education and training in quality concepts.

The key person responsible for providing quality leadership in the long-term is the college or university president. He is ultimately responsible for setting the vision and for accomplishing the mission of the institution. Due to the high level of authority and responsibility usually associated with his office, the president is expected to possess strong leadership skills. The president as well as other administrators is expected to possess the following leadership traits: to be visionary, long-term focused, open-minded, fair, attentive, assertive, supportive, customer-oriented and action-oriented. Having the ability to understand the market and anticipate market trends, to motivate subordinates and to delegate tasks is also a very strong point.

To sustain the quality improvement process, quality needs to be integrated in all major decisions and activities of the college or university. It will require a change in policies, practices, procedures, and values. It will require a change in personal leadership style and involvement. The management of such changes is the direct responsibility of the President and the Administrative Council, and ultimately the college or university Board. The faculty and staff, the students, and other stakeholders should have input in those changes before they are formally approved by the Board. If the administration is bent on pushing the total quality initiative it might be wise to establish a Quality Council to provide on-going leadership in establishing and maintaining the quality effort. The Council membership may include representatives from various administrative and academic groups of the institution including faculty, staff, students, alumni, and other stakeholder groups. While a separate Council is advisable at the initial stage of the quality improvement process, its functions can eventually be assumed by the Executive Council once the programme is up and running and quality becomes an integral part of the institution's educational process. A Design and Development Team may also be formed to develop and monitor the total quality plan and to encourage everyone to join and to contribute to the quality improvement effort. Members of this team are appointed by the Quality Council from critical divisions and departments of the college or university. All council and team members are to undergo training to increase their understanding of quality improvement principles and process improvement. At any rate, the top administration should take the lead in encouraging everybody to contribute to the total quality program. It is responsible to communicate progress to its internal and external stakeholders. It is responsible in establishing an educational climate conducive to institutional success which encourages everybody to stretch their spiritual, mental and physical limits to achieve superior performance and problem-solving capabilities.

Strategic Planning

Strategic quality planning begins with a firm commitment from the President, assisted by his fellow administrators, that he or she will no longer do “business as usual” in the institution. This comes from the realization that the environment within which institutions of higher education operate is no longer the same as before. The market has changed and the rules of the game have also changed.

The mission and goals of the institution should be regularly reviewed. Long-range planning should be done at the top level of management and it should be comprehensive. By comprehensive is meant involving everybody in the formulation and implementation of the strategy and ensuring that everybody understands what is expected of them to carry out the plan successfully. It is important that the administration truly understands the mission of the institution and the evolving nature of its business in the face of a very volatile market environment. It should also recognise the need to include everyone in the transformation. Such involvement must be encouraged within the context of a trusting, open environment where participants feel safe in expressing their views (both positive and negative) without fear of reprisals from either the administrators or from colleagues. Many at the college or university will probably be skeptical about the new plan. After all the very concept of an administrator saying that he or she will institute a new way of operating the institution and that every member would be asked and encouraged to provide input for improving the college or university is not a common phenomenon.

Since the total quality model is dramatically different from the Tayloristic model, it will take sometime to properly educate all the institutional participants. Part of the action plans suggested in this chapter includes: (a) a communications plan to ensure systematic and consistent communication about the quality effort; (b) a training plan to increase understanding of quality improvement principles and process improvement; (c) an education plan to initiate the transformation process with all members of the institution; (d) an assessment plan to obtain data to assess the current state of “quality” in the institution; and (e) a personal self-improvement plan to develop the institution’s most important resource – its people. Once the commitment to total quality is made and the institution has found a way to include everyone in the transformation, the next step will be to establish quality goals which are directly related to the mission of the institution. Each division, department, or person can be encouraged to set stretch goals that will be somewhat difficult to achieve yet will allow each one to be individually challenged while recognising individual differences. Those who learn to set stretch goals will ultimately be comfortable with the necessary changes that are thrust upon them daily.

Customer Focus and Satisfaction

If the college or university is to focus on the needs of its customers, it must first identify who these customers are. Basically, the institution has two sets of customers: external and internal. A few of its many external customers are the service industries, manufacturing industries, and government agencies that employ former students, the colleges and universities that build on what former students have learned, and the local community. Of these external customers, the general community is the final and by far the largest. The institution's internal customers include students, teachers, administrators, and governing bodies. Of these internal customers, the student is usually considered the most important. Customer satisfaction is the real measure whether or not goals are met. It is only through a systematic and factual collection of data from customers that one can really know whether or not the job is being done right.

The institution's customer focus may be improved by listening to its customer needs, approaching them in a special way, making them feel special, making inquiries on their progress, and acting promptly and carefully on their requests. It is important that the administrators consult with those (e.g. students, faculty, staff, fellow administrators) who will be adversely affected by their decisions to prevent feelings of alienation, isolation, and anger. It is also important that they focus on building trust by allowing free exchange of ideas and frank and open discussions of the problems at hand. Listening without intimidating, manipulating or becoming defensive is the key. When students, teachers, administrators, parents, community leaders and other stakeholders can listen non-judgmentally to each other, everyone can become partners in the continuous improvement process.

Measurement, Analysis, and Knowledge Management

Total quality improvement at the college or university can never be achieved without collecting data. The idea of collecting factual data should not be frightening but should help everybody in uncovering clues as to how the institution is performing. Some people (faculty, staff and students) at the institution are frightened by data collection where their responses can be identified. They are also wary of the use of statistical methods because of the belief that the data will be used against them. If students and employees feel threatened or feel that there may be reprisals from the administration or others they will be less likely to be honest and will not provide the institution with the required information. Although it is difficult to guarantee that this will not happen, all the institutional participants are encouraged to recognise these fears and move forward in spite of them. Factual data are necessary for effecting quality improvement at the institution. They need to be integrated into the planning and decision-making process of the institution. While seeking help, ideas, or suggestions is important, using these ideas to actually improve institutional services is equally as important.

A critical step to data collection will be an analysis of the various customer groups in the college or university. By customer is meant “who gets your work” as Deming defines it. Many processes and systems exist at the educational institution. There are administrative processes, academic processes and auxiliary service processes. Owners of these processes or those directly involved in the situation under study will need to identify their customers and suppliers. For instance, the cafeteria customers may include students, faculty, staff, administrators and others who buy food from the cafeteria. Customers of Plant Services will include those who receive services from the college or university maintenance personnel. The customers of the School of Business would include faculty in the School, the Academic Dean and other administrators, the students, and others who have interest in programmes offered by the School. Another critical step is to collect information for benchmarks and comparisons. This may be accomplished by establishing links with selected quality-based organisations (both educational and non-educational), consulting firms and professional bodies in the United States and abroad.

Before collecting any data, the institution will have to decide which problem(s) needs to be addressed and to state this problem clearly and succinctly. Then it needs to establish small groups of individuals who are directly involved in the situation to determine the root causes of the problem and to establish an action plan. The members of each team need to agree on the causes of the problem and may utilise one or more tools of quality to arrive at a consensus. An action plan is then developed and implemented to resolve the problem. Results are monitored to determine whether the recommended solutions should be standardised or whether other alternatives should be explored. If data collection and usage are handled properly and professionally, information becomes a friend which can give the entire institution a focus for change. Information gathering becomes a part of the plan-do-check-act cycle which is crucial to total quality implementation.

Workforce Focus

What is particularly needed in colleges and universities today are teachers who can help students do a better job. These are teachers who have the ability to empower students to bring about change in the traditional classroom and encourage them to constantly search for ways to improve their world, their beliefs, and their society. The kind of students produced will have the necessary skills to survive and thrive in the complex, ever-changing world of the twenty-first century. They will not be afraid to face change because they will have been taught to accept it as a way of life. The institution will need to exert effort to develop and utilise the full potential of all its members. A major thrust will be for each one to have a personal professional development plan which includes training in the principles of total quality. The action plan found in Table 7.2 does include an education plan and a personal self-improvement plan to develop the institution’s most important resource which is its people. Such efforts need to be modeled for walking the talk is vital to success. Institutional workers cannot be expected to be enthusiastic learners without comparable enthusiasm from institutional administrators. The object here is life-long learning not only in their personal lives but in their professional lives as well. A well-thought out personal development plan might include conference attendance, library readings, subscription to a variety of professional magazines, newspapers, and journals, as well as knowledge of the latest trend in one’s subject matter.

To encourage its personnel to accept total quality as a new way of doing things, the college or university can develop several recognition activities to help acknowledge the contributions of its faculty, staff and students. Awards may be given that recognise performances which exceed customer expectations, effective use of time and effort, exemplary and skill contributions to the institution and the community, and significant and measurable impact on the institution through effective teamwork and problem solving.

Operations Focus

There is a need to develop a cooperative atmosphere where administration, faculty and staff can work together in unity. The institution must foster a culture of trust in word and deed and an environment where everyone can trust in their ability to do a “quality” job, in others’ abilities to do the same in their respective areas and in the institution as a whole. There needs to be a concerted effort from every worker and administrator towards progress of any kind which means that everyone should be involved in studying problems, in providing solutions and in decision making. Barriers and problems can be surmounted by positive and active teamwork.

The institution must pay attention to the quality of inputs (students, faculty, staff) the process and the output. Emphasis needs to be given to the quality of teachers and staff. If possible, their performance needs to be reviewed regularly and results fed back to them for self-improvement. There is a need to implement an evaluation system which measures performance of each individual in the college or university including the administration. No one should be exempted from this quality improvement exercise. There is also a need to conduct a careful study of student and other stakeholder needs to determine whether the college or university and subsidiary groups (divisions, departments, offices) are providing quality service to students and to each other. Stakeholder input would be valuable for developing new programs, products, and services for the institution and for assessing whether existing ones are meeting their short-term and long-term needs.

Quality Results

Quality management is based on the use of properly analysed statistical data to show the achievement level of an institution or an individual. Data determines how one can work towards continuous improvement. The college or university measures that improvement by collecting data from its internal and external customers before and after changes are made to its processes and systems. It is extremely important to know what customers think about the services that the institution provides. This feedback based on fact is vital for the institution to truly embark on a continuous improvement journey. Feedback based on hearsay, hunch, intuition, or sporadic observation is neither sufficient nor adequate for determining processes requiring continuous improvement. Benchmarking institutional services with those of world-class educational institutions will provide a very good indicator of any progress. It is possible to take the best of several institutions and capitalise on the strengths of each to make massive improvements in the institution. Case studies documenting the activities of model schools which have already embraced the total quality philosophy are increasingly becoming available in the literature. A list of schools which have already adopted the principles of quality management is available in an annual special issue of *Quality Progress*, a publication of the American Society for Quality.

If not handled properly, performance reviews will probably do more to make the faculty and staff more antagonistic to the institution than any other single item. For instance, one of the problems associated with traditional teacher evaluation is that most are based on administrative classroom observation rather than on data. While such observation can provide some classroom insights, it can never replace an efficient, effective on-going data collection process. It may do well for college or university administrators to avoid the common fallacy which supposes that it is possible to rate people and rank their performance next year based on their performance last year. The performance of anybody can be the result of a combination of many forces – the person himself, the people that he works with, the job, the materials that he works on, his equipment, his customer, his management, his supervision and environmental conditions (noise, confusion, poor food in the college/university cafeteria). These forces account for incredibly large differences in performance between people. To rate an individual's performance without taking into account the aforementioned factors is courting the antagonism of the person being evaluated.

NO	ACTION	WHAT	WHO	WHY	HOW	WHEN	INDICATORS
1	Adopt programme	Explore quality issues and adopt total quality programme	President, and Executive Council	To ensure top level commitment to the effort	Appoint Quality Council	Month 1	Executive Council minutes
2	Form Quality Council	Appoint Quality Council from key positions in the organisation (administrative and academic groups, faculty, staff, and other employee groups)	President, and Executive Council	To provide on-going leadership in establishing and maintaining quality effort	Identify quality council mission, vision, guiding principles, goals	Month 1	Executive Council minutes; Quality Council minutes
3	Form the Design and Development Team	Create the Design and Development Team	Quality Council	To have the college/university team responsible for developing and monitoring the TQ plan; to encourage everyone to contribute to the quality improvement effort	Select people from critical divisions and departments; identify the mission, vision, and guiding principles for the team	Month 2	Quality Council minutes; Design and Development Team minutes
4	Communications plan	Plan to communicate the programme and process	President and Quality Council, Design and Development Team	To ensure systematic and consistent communication about the quality effort	Quality Council meeting, Design and Development Team meeting	Month 2 and continuously through the program	Written materials, Quality Council minutes, Design and Development Team minutes

5	Training	Train the Quality Council and Design and Development Team	Qualified individuals, which may include outside consultants initially	To increase the understanding of quality improvement principles and process improvement	Intensive workshops (a location away from work is preferred)	Month 2 with follow-through session continuous during the project	Training designed and delivered; written initial mission, vision, guiding principles and goals
6	Clarify mission, vision, guiding principles, and goals	Conduct meetings (workshops) focused on the college/university vision, mission, guiding principles, and overarching goals	Quality Council, Design and Development Team	To ensure a collective commitment to the mission, vision, guiding principles, and overarching goals	Discussion of assessment report and sessions focused on the review and development of material related to the mission, vision, principles, and goals	Month 2 with follow-through session continuous during the project	Training designed and delivered; written initial mission, vision, guiding principles, and goals
7	Education plan	Develop plan to introduce the quality programme and quality principles	President and Quality Council, Design and Development Team	To initiate the transformation process with all members of the institution	Publication of the plan, newsletters, meetings, seminars, workshops	Month 3	Quality Council minutes, Design and Development Team minutes, written documents
8	Introduce quality improvement	Introduce all members to quality improvement principles and techniques	President and Quality Council, Design and Development Team	To initiate the transformation with all members of the institution	Official documents, newsletters, meetings, seminars, workshops	Month 3	Quality Council and Design and Development Team minutes

9	Develop assessment plan	Develop a plan to assess the college/university and its leadership in terms of quality improvement principles and issues	President and Quality Council, Design and Development Team	To obtain data to assess the current state of “quality” in the institution	Review existing literature for assessment, after benchmarking and internal data, seek consultants	Month 4	Assessment instrument
10	Conduct assessment	Conduct assessment with customers and suppliers; analyse the results	Design and Development Team	To collect data on quality in the institution	Surveys, preview of documents, existing databases	Month 4	Completed data files
11	Prepare and circulate report	Prepare assessment report; circulate to the President, Quality Council, and key individuals	Design and Development Team	To share data, obtain feedback, and involve members	Formal meetings, written reports, newsletters	Month 5	Assessment report, other related documents, record of the meetings
12	Identify opportunities	Identify opportunities for quality improvement	President and Quality Council, Design and Development Team	To select target areas for quality improvement efforts	Analysis of report(s), discussions with key members	Month 5	List of target opportunities

13	Select and train teams	Select and train teams from major functional areas and other areas of the college/university	Co-ordinated by Design and Development Team in consultation with the Quality Council; training done by appropriate persons (may be outside consultants)	To increase understanding and commitment to quality improvement efforts among key persons in major areas of the institution	Select and appoint functional management and local teams	Month 6	Design and Development Team minutes; training designed and delivered to functional management and other teams
14	Personal self-improvement	Provide education and development for self-improvement of everyone	Each person in the college/university on a voluntary basis and preferably in teams to facilitate co-development	To develop the institution's most important resource, its people, for the benefit of the people and the institution	Provide courses and seminars in developing personal vision, mission, and objectives plans	Month 6	Positive evaluation of the courses/seminars, measurable impact on team effectiveness
15	Personal self-control	Provide education in developing personal vision, mission, and objectives plans	Each person in the college/university on a voluntary basis and preferably in teams to facilitate co-development	To demonstrate the college/university commitment to personal growth and control; to enforce team development with personal development	Provide courses and seminars in developing personal vision, mission, and objectives plans	Month 6	Positive evaluation of the courses/seminars, measurable impact on team effectiveness

N O.	ACTION	WHAT	WHO	WHY	HOW	WHEN	INDICATORS
18	Work on improving process	Functional management teams focus on internal process improvement efforts	Functional management teams, Design and Development Team	To provide team members with the opportunity to analyse and improve internal processes	Process and problem analysis	Month 7	Design and Development Team minutes' functional management team minutes
19	Benchmark best practices	Identification of best practices and performances on target processes and projects	Functional management teams responsible for improvement effort, with reports reviewed by the Design and Development Team and Quality Council	To maintain continuous improvement orientation; to obtain data on best practices	Review of data concerning the performance of outside quality leaders in each process area (field, related fields, similar functions)	Month 8 and continue through the project	Benchmarking data, internal reviews comparing process/project performance with outside quality leaders
20	Training, remediation, and enhancement	Develop and deliver additional training for persons identified in steps 13-15 or on topics identified through the benchmarking process	Design and Development Team in cooperation with the functional management and local teams	To maintain the relevance of the established education and training program; to enhance the knowledge, skills, and attitudes of Everyone	Formal training programmes, newsletters with an educational focus, written materials (job aides, manuals, performance guidelines)	Month 8 and continue through the project	Additional training completed and evaluated; written materials published
21	Customer-supplier orientation	Sensitivity to meeting, even anticipating needs of customers/constituents; establish long-term relations with suppliers	Each person in the college/university within the frame work of the teams, and in co-operation with the Design and Development Team and Quality Council	Implement the basic mission of the college/university and totally serve the customers/constituents	Provide courses and seminars on customer service; team-based projects addressing customer service process	Month 8 and continue through the project	Successful completion of and measurable impacts on customer service and supplier orientation projects

22	Charter improvement efforts	Process management improvement efforts recommended and approved	Local teams, Design and Development Team, Quality Council	To ensure selection of appropriate processes, authorisation, commitment, and support	Local teams recommend priorities and target processes; they are reviewed and approved by Design and Development Team and Quality Council	Month 8	Approved reports on process improvement priorities and target processes
23	College/university issues and priorities	Identify issues and priorities of the college/university	Local teams	To have an accepted set of issues that need to be addressed by the college/university	Cross-functional teams, following a systematic process	Month 9	Reports on activities and results of cross-functional teams
24	Integrate quality into planning	Integrate quality improvement principles and techniques into college/university planning	Led by the Quality Council, in cooperation with the other teams that have been formed	To institutionalise quality improvement principles and techniques into on-going planning activities of the college/university	Train all team members in quality improvement principles and techniques, development of policies and procedures	Month 9 and continuously through the programme	Training designed and delivered to all team members; written policies and procedures
25	Initial projects	Identify the initial projects based on the list of core processes of the college/university	Functional management and local teams in cooperation with the Design and Development Team and Quality Council	To ensure that projects are based on the core college/university processes and to select problems with a high chance of success as the initial projects	Each functional management and local team identifies the problem processes they would like to initially address	Month 10	Approved list of initial projects
26	Plan activities	Initiate the overall plan for each of the	Functional management and local	To identify the necessary steps, required	Each functional management and local team	Month 10	Fully developed plan for

		selected projects	teams	resources, and areas of collaboration with other teams for each project	develops the overall plan and strategy for the selected projects		each selected project
27	Organise activities	Coordinate the organisational framework of each project; conduct training on shared responsibilities (cross-training)	Functional management and local teams	To organise all the necessary steps, required resources, and areas of shared responsibilities for each project	Each team collaboratively organises its project with the help of a lead person as the facilitator; conduct workshops on cross-training	Month 10	Fully developed and understood organisational framework for each project
28	Implement activities	Begin each project based on the developed plan and organisational framework	Functional management and local teams	To initiate the selected team-centered quality improvement projects	“Just do it,” get started with the projects applying PDCA, action research, and appropriate quality tools and techniques	Month 11	Visible indication of projects beginning, initial progress reports
29	Control activities	Utilise the control strategies developed in the overall plan of the project	Functional management and local teams	To assure the progress of each project, based on planned control systems	Utilise the appropriate quality evaluation and feedback tools and techniques	Month 11	Scheduled progress reports
30	Complete the projects	Complete each project within the designated objective, specified time, and budget	Functional management and local teams	To demonstrate the success of team-centered project management		Month 11	Scheduled progress and end-of-project reports
31	Process and project evaluation	Evaluation criteria and procedures built into all quality improvement	Functional management and local teams responsible for	To learn whether the improvements occurred in terms of effectiveness,	Application of total quality tools such as control charts and other more formal	Month 12	Evaluation criteria and procedures identified for each project;

		efforts; quality improvement efforts reviewed and evaluated	improvement effort, with reports reviewed by the Design and Development Team and Quality Council	efficiency, and meeting the needs of customers; to maintain orientation to continuous improvement	evaluation techniques		periodic project reports
32	Measure overall programmes	Develop and conduct efforts to monitor and evaluate the overall impact of the quality improvement efforts	Quality Council and Design and Development team, in cooperation with the functional management and local teams	To obtain data on the impact of quality improvement efforts; to ensure a fact-driven organisational environment	Development of overall design that builds on and synthesise the team project reports	Month 12	Team projects evaluation reports, synthesised evaluation reports

Table 7.2 Action Plan for Total Quality Implementation