

**An Inquiry Into Quality Processes
In a
University and Its Faculties**

BY

BARRY J. WARRACK

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In Partial Fulfilment of
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ABSTRACT

This dissertation investigates the subject of quality in university teaching, research and service which is an important issue for the 1990's. How quality is defined and how it is measured may differ widely across faculties and between universities, which may be using a wide variety of processes to improve quality. This qualitative study has collected data at a single university by interviewing senior faculty members and administrators about their quality processes. Salient differences were found about how professional faculties view quality and how they go about improving their quality as compared to general faculties or the central administrative unit. Several climate factors have been found to have particular salience for quality in teaching, research and service such as the existence of a mission and goals statement, faculty structure, type of faculty, administrative processes, faculty culture and organizational politics. A five step model has been developed to integrate these quality climate factors with some of the practices found to be supportive of quality. The total quality management (TQM) literature was used to identify how well TQM concepts fit with the existing quality practices of the university studied. Also reviewed are the concepts of the learning organization and their utility for quality improvement. This dissertation concludes with the identification of areas for future research.

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1.0 INTRODUCTION

1.1 General Introduction and Statement of the Problem

Quality in universities is an important issue for the 1990's. Articles in recent issues of *Maclean's* (Lewis and Benedict, 1991) and *Canadian Business* (Litchfield, 1992) have created a great deal of discussion about this issue both inside and outside of universities. This view is reinforced by a submission by the University of Manitoba to the Roblin Commission on University Education (1993; p. 130) which states that "for the university's academic programs, quality will be a fundamental concern of both university and government". Discussions continue about the contribution to quality of factors such as university reputation, class size, level of resources, library facilities, general faculty characteristics and attributes of the student body. These discussions emanate out of an increased emphasis on accountability of universities and debate the usefulness of rankings as a valid measure of quality.

In Canada in 1990/91, \$9.7 billion went to funding at the university level (Norbert et al, 1991), where there were a total of more than 500,000 full time and 300,000 part-time student enrolments in 69 universities across Canada employing 38,000 professors. The median salary of these professors was \$45,000 in 1988/89. Two-thirds of all university professors have doctoral degrees. Universities awarded 125,000 degrees in

1989 and 22,000 diplomas and certificates. Academic research generates almost \$2 billion to support research endeavours in universities. This enormous economic investment in universities makes quality an important area for discussion and study.

Everyone recognizes the importance of quality in a university setting. A 1991 forum hosted by the Proctor and Gamble Company brought together business and labour leaders in the United States to discuss how the ideas and methods of quality, now widely accepted as standard practice in the world of business, could be adapted for use in universities and the educational system. This forum investigated the techniques of quality management, quality curricula and the use of total quality methods to improve higher education.

The call for increased accountability in education arises from a growing belief that universities must do more to ensure that their graduates can cope with the complex needs of society. New demands are also being placed on universities by governments. Smith (1991) suggests a sharing of information so that governments, the public, universities and their consumers (students, graduates, employers) can better understand the priorities, spending patterns and achievements of each university. Universities must be responsive to this changing environment as society comes to recognize what universities have accomplished and can accomplish in the future.

Wilson (1989; p. 169) presents the quality problem facing universities as "how do you improve your educational product when you can neither describe the product nor explain how it is produced?" Despite this elusiveness, universities are being called upon to measure their quality and provide evidence that they are accomplishing their goals as part of a growing trend to improved accountability to their various constituents (Rogers and Genteman, 1989). Concern over quality in universities comes from a belief that graduates are not as well educated in some sense as they should be (Webster, 1990).

Why is the concept of quality in universities such an elusive problem? One reason is that people differ in their perceptions of quality (Tan, 1986). Quality has different meanings for different people. There is not one universally accepted concept or definition of quality. Measuring quality in a university may be impaired by widely differing perceptions of what quality really is.

Research universities are believed to be in a quality crisis (Atkinson and Tunzin, 1992). They are committed to simultaneously pursuing several objectives, including instruction, basic and applied research and professional training and service to professions. They try to fulfil three missions: the creation of knowledge, the application of knowledge and the propagation of knowledge. Delivering on all three of these missions in an effective manner is difficult.

When trying to understand and measure quality in a university, the goals and objectives of the university must be clear. The goals are to add value to students or to change students in some positive or beneficial way. These changes may be attributable to a variety of factors (McMillan, 1988) such as background family characteristics, personality characteristics, maturation effects from work experience, institutional effectiveness and quality of program delivery.

Universities are under pressure to simultaneously increase their quality and productivity and at the same time decrease costs. It is critical that all faculty members share an unshakable commitment to improving quality (Chaffee, 1990). Universities can assess program performance by measuring the changes that take place over time in the abilities of students as they progress through their program of studies. This type of information must be linked to activities for positive change and improvement. While assessment is often directed quite narrowly at learning, it needs to be extended broadly into other areas of university activities.

Bogue and Saunders (1992) outline some assumptions and thinking about quality in universities, including a belief that only high cost colleges are able to exhibit quality, only large comprehensive colleges can be of quality, only nationally recognized colleges can possess quality, only colleges with impressive resources can display quality and only a few select colleges are able to exhibit quality. This kind of

thinking can lead to a pyramid of prestige, where only large nationally recognized institutions are ranked at the top.

Fairweather (1988) suggests that measuring the quality of academic programs is an elusive quest. Quality represents a qualitative statement of congruence between standards and practices (Webster, 1990). Not all criteria are of equal importance, and people place weights on different criteria according to their preferences. It is not possible to evaluate quality with respect to all criteria at the same time. Assessing quality is not an end in itself. The assessment process must develop criteria and standards for excellence.

Students have certain expectations and perceptions of quality in their college experience. Kealy and Rockel (1987) indicate that these perceptions pertain to academic life, the social life or atmosphere, the location of the campus and quality of athletic activities. Students' views of quality are highly influenced by their peer group. Parents often play an important role in influencing student perceptions of academic quality and assisting in their decision-making processes pertaining to the choice of campus. Students' perceptions of the quality of campus life are influenced by many factors; significant persons, written materials provided to them before enrolment and the recruitment activities of the institution.

The linkages between university activities and student outcomes are complex. Often the best undergraduate education occurs in those institutions with modest reputations and resources. Research on student development indicates that having a great reputation and excellent resources does not necessarily guarantee quality in educational programs (Bowen, 1981).

1.2 Objectives and Purpose of the Thesis

While there seems to be general agreement that university quality is an important area of concern, little research has been undertaken which focuses on the processes and quality arrangements used.

Underpinning this research are the three basic processes of the university:

- (1) teaching or instruction;
- (2) undertaking research or scholarship;
- (3) delivering service, both inside the institution and outside to the community at large.

These processes will be used to organize the research and data collection process.

This research will investigate the following question:

how does one university (i) define quality in teaching, research and community service, (ii) measure quality and (iii) go about developing processes for improving the quality of its teaching, research and service?

More specifically, the purpose of the research is to:

- (1) Identify and describe how faculties define quality in teaching, research and community service;
- (2) investigate the arrangements and measures for quality in place in different faculties;
- (3) research and identify impacting variables and factors critical to university quality including type of faculty, size of faculty, barriers to quality and the faculty culture or ethos;
- (4) develop an understanding of the processes, structures and arrangements for quality in university faculties and the factors which impact on quality;
- (5) identify critical areas to direct future research efforts into quality in a university.

Since teaching is a critical activity of universities, it has been the focus of a great deal of research effort in the past. Assessments of teaching quality seem to focus on the outcomes of students; measuring the gain or improvement in skills, the presence or absence of a job upon graduation or by using surrogate measures of the quality of graduates such as skill use after graduation or pay level on the job.

What is not clear from the research literature is to what extent quality improvement processes have been implemented, either at the faculty level or under the auspices of university administrative units. While quality of teaching is a concern expressed in the literature, quality of research seems to be of less concern as it already has a number of built in quality control mechanisms through its peer review processes.

The following set of research questions have been prepared to gather specific data pertaining to quality in a university setting:

- (1) to what level do faculties articulate the meaning of quality in their mission, goals or objectives statements;

- (2) how is quality defined and measured for the three main processes of teaching, research and service;
- (3) does the type of faculty (e.g., professional versus a general faculty) impact in any way the thinking and arrangements for quality;
- (4) what specific structures, activities or processes are in place for quality improvement;
- (5) where does the responsibility for leadership in quality lie in the university;
- (6) what role does the central university administrative unit play in directing faculty quality activities;
- (7) how do university administrative processes, budgeting processes and collective agreements impact on quality activities;
- (8) what role does accreditation play in ensuring quality;
- (9) does the culture (i.e., the values, beliefs, symbols, rules or methods) of the faculty play a role in quality;

(10) how do organizational politics aid or inhibit quality;

(11) what barriers exist to quality in teaching, research and service?

These questions were used to structure a set of interview questions to assist in the data collection. The next section will provide information on the site to be studied.

1.3 The University Research Site Chosen

The university chosen for study was a medical/doctoral granting research university with a broad range of faculties and programs of study. This comprehensive set of faculties has provided a rich source of data for the study. Data was collected through interviews with key informants in a variety of faculties and the results used to develop the findings presented in this study.

The interviews obtained responses to a series of questions from a number of deans, associate deans, department heads and professors. All faculties (a total of 21) in the institution were contacted for permission to conduct interviews. The views of central administrative units (vice-presidents and other key informants) were also collected to broaden the research perspective and assist with the development of comparative views.

1.4 Assumptions of the Research

A number of assumptions have been made to assist with the development of the research questions. These assumptions have helped in shaping the research design.

These include the following:

- (1) faculties operate independently as part of the larger institution;
- (2) missions may vary between faculties, and this may create differing criteria and arrangements for quality and its measurement;
- (3) the pursuit of quality in teaching, research and service activities is important;
- (4) while central administrative units provide general policy direction for quality, the main responsibility for quality improvement activities is assigned to individual faculties;
- (5) deans, associate deans /department heads and other key informants are primary sources of information on faculty quality improvement activities. Others in the institution such as those in central administrative areas can also provide a useful perspective;

- (6) faculty culture and history plays a significant role in influencing how facilities organize themselves for quality.

These assumptions assisted in the development of questions on quality and provide the basic underlying principles to guide the research. The next section will provide an outline of the literature review.

1.5 Outline of the Literature Review

A literature review was conducted to investigate the literature pertaining to quality in a university setting. Part of the literature review centred on the general definitions for quality used in business to provide background and a perspective to assist in understanding and contrasting important issues. The literature review also looks at measures used for assessing the quality of teaching, research and service. The last important area to be included in the literature review is a summary of factors suggested as impacting on quality within a university environment.

1.6 Organization and Outline of the Remaining Chapters

In Chapter 2 of this thesis the relevant literature on quality is reviewed. The chapter discusses both the business literature on quality and the literature on quality in universities.

Chapter 3 will discuss the research problem and research design in more detail and presents the particulars on how the research study was conducted, number of faculties contacted, number of interviews held and other such background information on the study. The qualitative methodology used to collect data for this thesis is discussed as well as methods used to ensure reliability.

Chapter 4 will discuss the findings obtained from the interviews and provide an overview of the data acquired during the research.

Chapter 5 will review the research findings as compared to the original research questions. This chapter will also identify general factors which impact on a quality climate and develop a quality model.

Chapter 6 will review the use of total quality management techniques in a university setting and the relationship of quality to organizational learning. It will also look into future opportunities for research into quality in a university.

2.0 REVIEW OF THE LITERATURE

2.1 Industry Definitions of Quality

To effect quality improvements, organizations need a clear understanding of quality.

Forker (1991) states that executives need to have a clear conception of their quality objectives before goals can be articulated and translated into measurable targets.

Without a clearly articulated definition of quality, there is no central focus from which to act towards quality improvement.

A number of definitions from the total quality management (TQM) literature provide interesting insights into quality. Garvin (1984) has classified quality into five general categories; transcendent, product-based, user-based, manufacturing based and value based.

The transcendent view is synonymous with the concept of innate excellence. While quality cannot be clearly defined, everyone knows what it really is or can learn to recognize it through experience.

The product-based approach states that quality can be precisely defined by identifying the desired attributes present in a good or service. This gives quality a hierarchical

dimension upon which products or services can be rated, based on the presence or absence of attributes. The presence or absence of attributes can be assessed objectively and used to measure quality.

The user-based approach focuses on consumer preferences and defines high quality as the good which will best satisfy the needs and wants of customers and provide them with the greatest satisfaction.

The manufacturing-based approach defines quality from the point of view of an engineering definition of how well a product conforms to specifications. Any deviation from specifications implies a lack of quality.

The last definition is the value-based approach which defines quality as a measure of affordable excellence. In this situation, quality is equated with value as a measure of worth. This concept is difficult to make operational, but may prove useful in thinking about the intangible benefits of quality in a university.

Garvin (1984) states that there is a problem with these definitions with respect to their vagueness in defining the basic elements of quality. He goes on to comment on a need for multiple quality definitions to assist with quality improvement.

Perspectives are expressed in the literature which can assist with the development of an understanding of this complex matter of quality in universities. The following definitions demonstrate industry beliefs about quality.

Deming

The quality movement is said to have begun in Japan with W. Edwards Deming's work after the Second World War. Much of his early work was related to statistical methods of process control in manufacturing. Deming has three separate categories of quality (Gitlow and Gitlow, 1987):

1. quality of design/redesign;
2. quality of conformance;
3. quality of performance.

Quality is defined as to how well a good or service meets the needs of the customer, who acts as the final judge of its quality. Deming stresses that for improvement to occur, it is necessary to find the root cause of mistakes and then build a system which minimizes the possibility of future mistakes. Deming (1986) has developed 14 principles of total quality management:

1. Create constancy of purpose toward the improvement of products and services;
2. Adopt a new philosophy with respect to quality and take on leadership for quality change;
3. Cease dependence on inspection;

4. End the practice of awarding business on price tag alone;
5. Improve constantly and forever the system of production and service;
6. Institute training;
7. Institute leadership for quality;
8. Drive out fear so that everyone is able to work effectively;
9. Break down barriers between departments;
10. Eliminate slogans, exhortations and targets for the workforce;
11. Eliminate numerical quotas;
12. Remove barriers to pride of workmanship;
13. Institute a vigorous program of education and self improvement;
14. Take action to accomplish the transformation.

Juran

Another of the important figures of the quality movement is Joseph Juran who defines quality (Juran and Gryna, 1988) as fitness for use. A quality product satisfies customer needs, provides product satisfaction and is free from defects.

Crosby

Another quality expert is Phillip Crosby (1979, 1984) who defines quality as conformance to requirements. Management's responsibility is to state its standards for quality, supply the necessary tools and training to employees, and encourage and assist

employees to meet quality requirements. The key to good quality is doing it right the first time.

American Society for Quality Control (ASQC)

ASQC (1983) defines quality as the totality of features and characteristics of a product or service that bear on its ability to satisfy a given need.

Other Definitions of Quality

Gabriel Pall (1987) defines quality as a state of conformance which leads to zero defects and full compliance with requirements. In service industries, the service recipient experiences the product personally. For each customer, this service may be perceived in a different manner.

Kaoru Ishikawa (1985; p. 45) states that "quality means quality of work, quality of service, quality of information, quality of process, quality of division, quality of people including workers, engineers, managers and executives, quality of company and quality objectives".

An effective quality system must permeate the organizational fibre in order to be successful. Criteria used in the selection of the Baldrige award (Zemke, 1991; National Quality Award 1991 Application Guidelines) include:

1. leadership of senior management within the organization with respect to a vision regarding quality and their ability to design a management system to sustain this vision;
2. information and analysis through the use of data and information within the organization to support quality activities;
3. strategic quality planning systems to be used to integrate the business plan with the quality plan activities to develop an integrated strategic plan;
4. the existence of a human resource development policy which encourages participation, personal growth and quality leadership;
5. the existence of quality assurance systems for products, processes and services;
6. quality results through the putting in place of operational systems to monitor and measure results;
7. customer focus and satisfaction which is derived from an assessment of client needs and requirements which also looks at the quality of competing firms.

2.2 Some of the Dimensions of Quality:

An important dimension of quality is the role of the process itself (Deming, 1986; Pall, 1987, Juran and Gyra, 1988; Ishikawa, 1985). The process is the logical organization of people, materials, energy, equipment and procedures into work activities designed to produce a specified end result or product. A manageable process has measurable inputs and outputs and is adaptable to change. Every person's job is part of some process.

The process makes a logical starting point for quality improvement activities. Some components of a process are more important than others. Universities have the production processes of teaching, research and service which require inputs and produce outputs.

Garvin (1984), Pall (1987) and Schonberger (1990) have identified several dimensions of quality:

1. performance: the primary operating characteristics of a product;
2. features: the special characteristics which come along with a product;
3. reliability: the probability of the product failing in a specific period of time;
4. conformance: the degree to which the product's design and operating characteristics match some preestablished standards;

5. durability: the product life;
6. serviceability: the speed, courtesy and competence of repair;
7. aesthetics: how a product looks, feels, sounds, tastes, or smells;
8. perceived quality: the aesthetic beauty of a product is another measure of the product quality;
9. expectations: the users anticipation of a future state of things;
10. needs: a lack of something;
11. requirements: the potential customers or consumers view of the work product;
12. specifications: the formal statements or descriptions of the product;
13. quick response: the delay or elapsed time of service;
14. quick-change expertise: changing over from one activity to another;
15. humanity: the service friendliness, attentiveness, humility and honesty;
16. value: how much for what price.

2.3 Quality in Higher Education

Tan (1986, p. 260) indicates that "no one is certain what the definition of quality should be...Perhaps we need to establish a number of definitions of quality, each applicable to a particular type of institution." Mayhew, Ford and Hubbard (1990, p. 29) state that "the quality of undergraduate education consists of preparing learners

through the use of words, numbers and abstract concepts to understand, cope with and positively influence the environment in which they find themselves".

Astin (1985, 1987) states four views of quality in universities: excellence of reputation, excellence of resources, excellence of outcomes and excellence of content. Astin contends that excellent institutions are those which add the most value in terms of student knowledge, personal development, and the scholarly abilities of faculty members. Astin's talent development viewpoint of quality states that "the most excellent institutions are, in this view, those that have the greatest impact - add the most value, as economists would say - on the student's knowledge and personal development and on the faculty member's scholarly and pedagogical ability and productivity" (Astin, 1985, p. 61).

Fincher (1988) suggests that institutions of higher education often produce results that are unintended, unanticipated and embarrassingly inconsistent. Often, outcomes are contradictory, caused by the existence of a pluralistic set of goals in education. While universities have purposes which are planned, expected, intended, and anticipated, their goals are often short term. Educational purposes are not logically consistent, mutually exclusive or exhaustive.

There are large variations between disciplines in terms of the opportunities that professors may have for publication and availability of research grants (Skolnick,

1989). The use of the volume of research grants as an index of quality acts as a sanction against reflective research done in a library or a professor's office where only a small grant or no grant is required. In some situations it may be arguable whether greater spending in support of research is indeed a true measure of quality.

Curriculum design creates difficulties for improvement including the level of specialization of subject matter and depth of material versus breadth (Smith, 1991). In addition, the interdisciplinary nature of teaching is such that some teaching may occur outside of the department as service teaching. Pressures continuously come from professional associations and other stakeholders who believe that the curriculum should have a greater emphasis on preparation for the world of work.

Astin (1993, p.421) suggests that "as long as faculty in research universities are expected simultaneously to perform research, teaching, advising, university service and outside professional activities, teaching and advising will continue to receive low priority". Astin (1993) believes an emphasis should be placed on pedagogy and other features of the delivery system, rather than on formal structure and curriculum content.

In terms of the presence of unions, Cameron (1985) states that while institutional ineffectiveness may lead to the formation of unions, unionism does not have a positive influence on the effectiveness of the university. When energies become focused on

legalistic issues and adversarial relations, a strong possibility exists for scholarship, collaboration and personal development to be ignored.

Some say that universities do not produce anything (McGuire et al, 1988). There are difficulties identifying and measuring outputs and, to a lesser extent, reaching agreement on the specificity of inputs. Quality measures must be able to assess both the quality of graduates and the significance of publications produced by faculty members.

Boyer (1990) discusses many problems which make quality improvement in universities difficult including the fact that teaching is not well rewarded. Research and publication are often the primary means by which professors achieve their academic status, which can cause confusion over goals. Professors are often caught between conflicting obligations and pressures.

One of the important distinctions between teaching and research (Astin, 1993) is that research is a very public activity whose products can be directly observed and assessed by others. Teaching on the other hand is a highly private activity, where direct observation by others is infrequent, if not actively discouraged. Smith (1991) voices concerns about an undervaluing of undergraduate teaching. Part of this is attributable to the dominance of research over teaching and the undervaluing which occurs as

quality in teaching is not awarded the same level of importance as research in decisions respecting hiring, promotion and tenure.

Boyer (1990) has found that more than half of the faculty members of research and doctorate granting institutions sampled agree that the pressure to publish reduces their quality of teaching, and more than 60% feel that teaching effectiveness and not publications should be the primary criterion for promotion.

One barrier to improving teaching as stated in a brief to the Smith Commission (1991) is that while excellence in research often results in more freedom to do research, excellence in teaching does not result in greater resources to improve and develop courses. Teaching and research efforts are normally accorded the same weight, and in some faculties service is equal to the other two. There is apparently no university that states in its policies that research should count for more than teaching.

Important to an understanding of university quality is an understanding of the three primary processes of teaching, research and service. Bowen (1974) states that instruction, research and service are all based on a single unified activity, learning, which can be defined as "knowing the known" or "discovering the new".

James Gardiner (1992) discusses how teaching and research are central to the academic enterprise and as they are complementary and supportive processes, should

not operate in opposition. While teaching includes those purposeful activities to transmit, inform and guide the acquisition of knowledge, research includes not only the conducting of experiments but a wide range of creative work, scholarship, problem-solving and experimentation to inform about the world.

Webster (1990) breaks quality into 5 different areas; (1) quality based on structural criteria such as the facilities of the university, (2) quality based on processes or procedures of universities, (3) outcome criteria based on short and long term effects of education, (4) efficiency criteria based on comparative cost efficiency, and (5) criterion based quality relating to specific activities which are discrete, clearly definable and precisely measurable.

Smith (1991; p. 35) quotes the President of Stanford University as saying "it is time for us to reaffirm that education - that is teaching in all its forms - is the primary task". Boyer (1990) defines teaching as the education or enticing of new scholars. Professors are learners as part of their scholarship activity associated with teaching. Teaching includes transmitting, transforming and extending knowledge.

Instruction is bringing about desired changes in people (Bowen, 1974). Students acquire knowledge and understanding about the world and exhibit an ability to solve problems using analytical methods. Included in instruction is an improvement in the student's art of expression or communication of the written or spoken word as well as

an increase their knowledge of self and the refining of their character traits.

Instruction includes changing people through the imparting of specific vocational skills. Teaching must take into account the varying background of students and their differing abilities, interests and aspirations. Teaching may be directed at both undergraduate and graduate levels and includes advisory functions such as thesis supervision and career planning.

Boyer (1990) believes that excellent teaching, constantly reviewed and updated involves many hours of intense scholarly activity. Activities such as the writing of books, the preparation of summaries of scientific meetings, the development of briefings for government ministries as well as data gathering, hypothesis testing and verification can all be defined as scholarly activity.

Applied scholarship (Boyer, 1990) includes activities that relate directly to the work of the profession such as consultation, technical assistance, policy analysis, program evaluation and other such activities. The scholarship of integration allows scholars to give meaning to isolated facts, connect across disciplines, to put into perspective and generalize to the larger context. It also includes the interpretation of findings and the fitting of research into broader intellectual patterns. There is an emphasis on work which is interdisciplinary, interpretive and integrative.

Sheffield (1982, p. 4) defines research as "reflective enquiry and scholarship, empirical investigation, critical analysis and in-house studies for organizational use." It may be oriented to theory building, problem solving, policy formulation or planning. Basic research undertaken to generate new knowledge for the sake of knowledge is important and is viewed as "the first and most essential form of scholarly activity, with other functions flowing from it" (Boyer, 1990 p. 15). The distinction between basic and applied research is often fuzzy. Basic research is characterized by interest in knowledge for its own sake, and by a contemplative and philosophical spirit.

Professors must constantly study, review, synthesize, analyze, criticize and expand on knowledge (Bowen, 1974). The advancement of human knowledge is accomplished through research, scholarship, social criticism and philosophical reflection. Bowen states that scholars undertake research, publish information about their research activity and use this knowledge by conveying it to students or applying what they have learned.

Service is activity undertaken to serve society and reshape it (Boyer, 1990). Public service includes activities both within the university and service to society as a whole. Some public service occurs as a by product of instruction and research (e.g., medical/dental care or teacher certification) and may be an integral part of teaching or research activity (Bowen, 1974).

Other types of activity may be considered service such as external consulting, providing advice or undertaking studies on various subjects. The scholarship of integration is, as Boyer (1990) points out, the application of knowledge to problems. Service provides an important opportunity for this type of scholarship activity.

2.4 General Issues Pertaining to Quality in Universities

Improving quality in university education relates to a need to take action to improve quality and productivity within the institution and decrease costs (Chaffee, 1990).

Commitment to quality improvement by faculty members is seen as a critical factor. Faculty members should be canvassed for their ideas on quality improvement, given recognition for good ideas and supported in their quality initiatives.

Stuart Smith (1991) addresses the importance of quality performance indicators in universities and states that the adoption of simple quality measures and reporting on them publicly would aid universities in public accountability. Smith quotes Derek Bok, former President of Harvard University (p. 129) as asking the important question "how can we develop measures to evaluate the quality of learning that will encourage universities to improve their educational programs and motivate professors to improve their teaching". Universities must focus attention on improving what they do.

2.4.1 Complexity

Universities are complex organizations. A university will have difficulty defining quality, due to its diffuse mandate and many different products and processes. The complexity of the university setting is exacerbated by a shrinking resource base, increasing student demand and an explosion in the knowledge base (Thompson, 1967).

2.4.2 Ethos or Culture

James Wilson (1989) has identified the order, atmosphere and ethos of the organization as important to its effectiveness. Although organization structure does matter, there may not be one best way to organize. Important to the success of the organization is its goals, the prior experiences and personal beliefs of its members, peer expectations and various special interest groups. These shape the organizational ethos and culture. The political environment may also limit resources and reduce autonomy within the organization. These factors can influence quality in a university. Wilson (1989) stresses that since the goals of universities are ambiguous, how it is organized is important.

2.4.3 Organizational Structure

Universities rely on organizing systems based on collegiality to assist in decision-making. Much of this work is accomplished through the use of committees to guide the organization. As Mintzberg (1989) says, the complexity of the situation leads to the granting of discretion to faculty members. Most coordination is handled

automatically through the skills, knowledge and expertise of the staff who work closely with their clients, the students, in producing their learning. Outputs are difficult to measure and are not amenable to standardization in a university.

Universities have a structure that is both bureaucratic and decentralized.

Mintzberg (1989) states that universities have a core of staff who provide basic support functions such as libraries, computer services, and printing to name just a few.

The normal form of decision-making in a university is collective choice where a community of individuals share a common interest in making decisions. Some decisions may be made by administrative fiat, while others are left to the professional judgement of faculty members including exercising judgement on what material to teach, the particular teaching methods to use, what research to undertake and what articles to publish. Academic freedom has lead some to suggest that universities are a form of organized anarchy.

2.4.4 Characteristics of Universities

Sifert, Benton and Ritzman (1992) and Schwartz (1991) have identified several characteristics of service sector firms which can be adapted to thinking about quality in universities:

Operations Characteristics of University Services

1. humanistic, it is a professional organization with highly skilled staff;

2. universities operate in a volatile/uncertain environment;
3. the processes such as teaching and research are labour intensive;
4. decentralized responsibility where much of the responsibility is delegated to the faculty or department level;
5. quality problems directly affect the student as customer;
6. it is difficult to balance resources with demands;
7. the student is part of the process and intimately involved in the teaching and learning process.

University Output Characteristics

1. activities such as research or teaching in a particular knowledge area are specialized and cannot be mass produced;
2. knowledge is an intangible and/or perishable product;
3. teaching (the production function) and learning (the consumption function) are simultaneous acts.

General Characteristics of University Services

1. faculty members must be able to interact with the public and students;
2. faculty members are loosely supervised; the university depends on their professional training and expertise to produce high quality results;
3. a high degree of personal judgement is required of faculty members;
4. quality is subjective and difficult to measure for teaching, research and service;

5. capacity of the system is hard to measure; there is a variable rate of output;
6. economies of scale are less readily attainable with present technologies than in more traditional industries such as manufacturing.

Researchers such as Benson, Saraph and Schroeder (1991) have suggested that more research is needed into the difference between manufacturing and service industries, such as universities, to elaborate on this difference.

2.5 Measures of Quality

Students are expected to improve as they progress through university (Smith, 1991).

This improvement includes the expansion of their ability for critical thinking, increased respect for others, good citizenship, leadership, self teaching and obtaining a basic knowledge of history, geography, science and reasonable numeracy skills. This is Alexander Astin's value added viewpoint which measures the gain that occurs between entering the university and graduation and tries to assess what portion may be attributable to the university experience versus maturation effects or the effects of various life experiences.

Kirkpatrick and Locke (1992) state that faculty quality is one of the core components of quality in a business school and can include such factors as faculty scholarship, publication in prestigious journals, tenure, rankings of professors, faculty member reputation and research productivity, perceptions by peers as being excellent in

scholarship and teaching, teaching skills of faculty members and service provided to the wider community. These may or may not be valid measures of quality in a faculty.

There is a problem in devising and implementing sound, practical, reproducible and universally acceptable measures of quality in order to determine whether or not quality research or teaching has been produced (University of Manitoba, 1993). Part of this complexity of outcome assessment pertains to the fact that university graduates are in fact unfinished products when they leave. It may not be possible to determine a true picture of what constitutes quality until much later.

2.5.1 Reputational Studies as Quality Measures

McGuire et al. (1988) state that there is no consensus on the perfect output measure for a research university. They suggest that, at best, reputational ratings are measures of perceived rather than real program quality. King and Wolfe (1987) and Saunier (1983) suggest that faculty reputations are best explained by program size and faculty scholarly activity. They indicate that it is not surprising that larger faculties have greater reputations, due in part to their sheer size.

Webster (1981) suggests as reputational measures the awards, honours and prizes of faculty members, citation indices, the achievements of students in later life and the

general reputation of the institution. He suggests that reputational rankings developed by experts have an advantage in that those employed as raters supposedly know something about quality in a discipline. The results therefore have some face validity. There are disadvantages in that it is only possible to rate those faculties with substantial research reputations. Below the top dozen or so, the rankings are meaningless. The halo effect of the university can have a great impact on the ratings which may lag several years behind reality.

Rankings have been criticized for not being based on scientific performance (Lindsay, 1991). It is often argued that funding levels are related to quality. However it has been found that universities are not built on funding alone. Universities with substantial resources do not necessarily achieve distinction. The right administrative leadership is also needed for the university or faculty.

The entire process of rating and ranking in universities seems to be built on the philosophical premise that quality is in limited supply (Bogue and Saunders, 1992). Ranking universities by their quality attainment level, suggests that the highest levels of quality are only attainable by a few institutions, and other institutions may contain less quality.

Reputational studies have been criticized because of their heavy use of input from key informants like presidents, deans and department heads which may create respondent

bias (they are usually older and rate more prestigious institutions more highly), alumni/alumnae bias (persons who are graduates rate their alma mater more highly than those they have never attended), and the difficulty in distinguishing faculty member reputation from the general reputation of the faculty. When a poll is conducted, it creates a pecking order, in which one institution can only move up at the expense of another moving down; in essence a zero sum game.

Conrad and Blackburn (1985, p. 23) suggest that reputational studies should be continued, "especially if methodological refinements are made, if quality is evaluated through multiple criteria, if normative standards of quality are used, and if quality is evaluated, not just at "leading Schools."" As Tan (1986, p. 240) says, "reputational surveys are measures of perceived program quality - not quality in some ideal or absolute sense."

2.5.2 Objective Indicator Studies as Quality Measures

These studies use objective indicators such as faculty research productivity, financial resources or student outcomes. The studies of Webster (1990), Brown (1989), Lindsey (1991), Ory and Parker (1989), Cook (1989), and Seneca and Taussig (1987) suggest many objective measures which can be used as surrogates of quality such as number of scholarships awarded, level of faculty salaries, amount of library resources, number

of publications, condition of the physical plant, number of degrees awarded in the natural sciences and engineering, level of research funding and student/faculty ratio.

Objective indicator research is based on the premise that a high quality faculty yields institutional quality. However, if faculty members have a poor publication record, does that mean lower quality or does it indicate that there may be intervening negative factors such as higher teaching loads, a general lack of access to proper library facilities, or a lack of leadership for research?

Astin (1993) cites a number of factors which appear indicative of quality programs including the percentage of faculty holding doctorates, average faculty salaries, student/faculty ratio and the level of investment in student services. While a low student/faculty ratio is indicative of quality, the relationship is complex as larger classes may have teaching assistants to support instructional activities.

The process of assessing quality by counting research output can inhibit work which has a long gestation period, penalizing those whose inclination is to publish only when they have something polished and highly significant to publish (Skolnick, 1989).

There is a preoccupation with the quantity of publications, as opposed to quality. This emphasis is said to be responsible for a great deal of the seemingly irrelevant and excessively academic articles that are published.

2.5.3 Correlational Studies of Quality

Correlational studies conducted by Rogers and Genteman, (1989), Volkwein (1989), Fairweather (1988), Cameron (1985), and Kealy and Rockel (1987) identify those variables which correlate the best with faculty or program quality, however that may be measured. They include such variables as department size, amount of federal funding, library resources, faculty salaries, and faculty research productivity. The model assumes that funding equates with improved research productivity which in turn is linked with institutional effectiveness and quality.

Correlational studies use similar measures as reputational and objective indicator studies but have been criticized because they are not grounded in theory and researchers perform "will-of-the-wisp" regression studies on data in search of factors which may correlate well by chance but have no real substance.

2.6 Specifics on Quality Improvement in Universities: Processes in Place to Foster Higher Quality

The part of a university to first adopt quality concepts is often the central administrative areas (Tausig, 1992). The hope is that measurable productivity improvements can be obtained which can be reflected by reductions in administrative overhead. When ideas to improve the quality of teaching and research are suggested, they are often seen as threatening to academic freedom. As universities face more

difficult times with spiralling costs and reductions in funding support, there is a heightened awareness of quality.

Universities are using several methods to enhance their quality (Bogue and Saunders, 1992). These include the following:

1. funding eminent scholars and the establishment of endowed chairs;
2. establishing centres of excellence, pertaining to specific subject matter research areas;
3. special equipment funds;
4. grant programs to stimulate innovation in teaching and research;
5. research enhancement programs;
6. equipment or library enhancement;
7. linking research to the needs of the economy;
8. developing new methods to recognize quality faculty performance.

As part of a submission to the University Education Review Commission of Manitoba, the University of Manitoba (1993) states that determining the quality of a professor's research, scholarship or creative work should rely on a rigorous assessment by his or her peers. Peer reviews are involved in reviewing articles and books for publication, in the grant application process and are also important for the creative or performing arts.

2.6.1 Academic Program Reviews

Academic program reviews are a system of visiting committees brought in from outside the university to review programs and develop recommendations on how to improve them. They are considered a useful method of assessing and improving quality (Bogue and Saunders, 1992; Cyert, 1991). There must be consensus as to the evaluation criteria to be used in the review. Reviews must have the appropriate level of sensitivity to the local institutional setting and faculty mission and must reflect the diversity of models for scholarship at work in various fields of study. The results of these reviews need to reflect a consensus of those involved in the review. Adequate preparation is needed to assist the consultants undertaking the review. The findings should be a matter of public record.

These reviews can be seen as a kind of quality control (University of Manitoba, 1993). Ewell (1985) indicates that assessment is external to the educational process and is undertaken to improve the process of teaching and learning, but is not actually about teaching and learning. Responsibility for the assessment process lies as much with academic administrators as with the faculty. Academic program reviews are defined as a comprehensive evaluation of the curriculum leading to a degree (Bogue and Saunders, 1992) and are conducted for the following reasons:

1. Financial, to identify the need for additional resources, or to ascertain if resources are being applied in the most effective manner, or whether the application of resources could be improved. Reviews may also look for unnecessary waste and duplication, which reduces efficiency.
2. For educational reasons, to identify the need for a new program or improve, revise or terminate an existing program, (i.e., is the program, in fact, still achieving the goals for which it was established)?
3. Reviews may be conducted for administrative reasons, to discover if a program is being operated within prescribed guidelines.
4. Programs may be reviewed for ethical reasons to investigate if the program is being operated within sound ethical guidelines, with good management practices, and with a high level of efficiency and integrity of operations.

Program reviews are often conducted from the top down. Criticisms may be directed at the choice of consultants selected to conduct the review, as they may ignore distinctions in mission, may not be knowledgeable about institutions, and may leap to conclusions. Some reviews may have more of an appearance of being of a punitive nature rather than being seen as an improvement function.

2.6.2 Course Evaluations

Batemen and Roberts (1992) suggest that course evaluations provide the best information about teaching effectiveness. While professors may have a strong interest in improving teaching and research, improving the curriculum is a more difficult task. Curriculum improvement often becomes a compromise of the interests of various constituencies.

Faculty members often express reservations over the value and meaning of data collected in student evaluations of teaching effectiveness (Baum and Brown, 1980). The main argument is that the criteria used by faculty members to assess teaching are different from those used by students. Faculty members tend to view their criteria as more relevant to the longer run mission of the university.

This has also been confirmed by Feldman (1988) who discovered that the perceptions of students as to what entails good teaching does not necessarily match the perceptions of professors themselves. Students were asked to specify the attitudes, behaviours and pedagogical practices most important to good teaching. They found that effective instruction leads to effective learning. Core dimensions of this effectiveness include stimulation of interest in the subject matter, the enthusiasm of the teacher for the subject being taught, the teachers knowledge of the subject, their intellectual expansiveness, preparation and organization of the course, clarity, elocutionary skills of the teacher, their sensitivity to and concern with class progress, clarity of course

objectives and requirements, relevance of the course material, use of teaching aids, perceived outcomes, impact of instruction, fairness and impartiality of assessment, personality characteristics of the instructor, the nature of the feedback to students, encouragement of questions and discussion, intellectual challenge and encouragement of independent thought, respect for students, teacher availability and helpfulness, motivation of students to do their best, encouragement of self initiated learning and teacher productivity in research and related activities.

One criticism of student evaluation of professor teaching performance (Feldman, 1988) is that students often value an authoritative style, showmanship, wit and other forms of expressiveness at the expense of substance, meaning and course content. Student outcomes assessment provides one type of measure of client satisfaction (Bogue and Saunders, 1992). Any results from these studies are affected by the fact that student perspectives on goals and outcomes will change during the college experience and after graduates have exited the doors of the institution.

2.6.3 Accreditation, Certification and Licensure

Bogue and Saunders (1992) define accreditation as the status granted to an institution or a program within an institution which has gone through a process of evaluation and been found to meet or exceed certain minimum stated criteria. It is important to distinguish this process from certification, whereby an individual goes through a process that determines that he/she has fulfilled all requirements in a field of work.

Licensure on the other hand is a term which applies to an individual whereby they are granted the authority to practice in a particular field.

Concern is often expressed over fears of public disclosure of results (Bogue and Saunders, 1992). At the present time, the methodology of assessment is not well developed. There are concerns that the narrow definitions of quality and a narrowing of emphasis to meet the criteria of accreditation may cause distortion of the system (for example, the teaching to test emphasis). There may be a tendency to believe that only what is measurable is important.

Criticisms have also been expressed about accreditation as being little more than professional back scratching (Bogue and Saunders, 1992). Faculty members often exhibit more loyalty to their professions than to the institution, which creates problems and tension at times. It seems that often there is widespread belief that the general public has neither a good understanding of nor an appreciation for the policies and practices of the university. Accreditation often centres on measures of input, to the neglect of results, when actual outcomes are what is really important. The public may come to see accreditation as fostering weak and minimal standards.

Accreditation is not of great benefit to high quality institutions whose standards are far above the minimum (Mayhew et al, 1990, Bogue and Saunders, 1992). Despite this,

"voluntary accreditation is still the best mechanism for certifying undergraduate education" (p.233).

Accreditation carries a cost, and this cost can be significant (Bogue and Saunders, 1992). There may be concern that a single review every 5-10 years is insufficient to properly maintain or enhance quality. All of these concerns reduce the effectiveness of accreditation as a quality improvement tool.

Licensure provides an additional way by which universities and professional associations ensure quality in programs (Bogue and Saunders, 1992). Licensure is a process by which someone is granted permission to engage or practice in a given occupation. The public is assured that a licensee has fulfilled the basic requirements of the profession. Licensed professionals control their profession and revise the curriculum, set policy, and promote the profession. The process of licensure acts as a form of quality assurance of graduates.

Licensure has been criticized as self serving, in that professional groups are interested in promoting their own self interest (Bogue and Saunders, 1992). While it does not provide a proven way to exclude those who may be incompetent, licensure can at the same time exclude many competent and deserving persons.

The next section of the report will deal with the research design for this study.

3.0 RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

A qualitative research methodology (Strauss, 1967; 1987) was selected to investigate the views of university faculties pertaining to quality. This study utilizes data collected from interviews with senior administrators and faculty members to investigate quality in its real life context.

Lawler et al (1985) state that experimental and quasi-experimental designs are difficult to apply in field settings. Use of a qualitative research design has allowed the measurement net to be cast widely to measure many variables and capture unintended consequences, unexpected interventions and other unpredictable turns of events.

Qualitative data are essential to understanding a complex situation.

Quality research is undertaken by conducting rigorous and scientific study where the data generated have both reliability and validity. Data must be treated in an unbiased manner to produce compelling conclusions of interest to the reader in a manner which rules out alternative interpretations. While quantitative research captures a view of the world as a concrete structure, qualitative research takes into account the fact that human beings are active in a world which is neither fixed or concrete (Morgan and

Smircich, 1980). Messy research problems are more appropriately addressed by a qualitative research strategy.

Qualitative research is governed more by the hermeneutic paradigm as compared with the positivist or scientific paradigm for quantitative research (Gummesson, 1991). The main goal in qualitative research is to interpret and understand the situation being studied. There is a recognition of subjectivity in the research, and of there not always being a clear distinction among the facts. The data is subjective in nature and collected in the field at the subject's own location. The knowledge and experiences of the subjects are used as described in their own words to the researcher. This information is then interpreted by the researcher using his/her own frames of reference. Researchers may be forced to make value judgements about the data to assist in the analysis. In qualitative research, researchers are encouraged to allow their feelings and reason to govern and direct their actions. Researchers must be careful to "not assess hermeneutic research from the vantage point of the positivistic paradigm" (Gummesson, 1991).

Quantitative data sources are unlikely to capture the soft core concepts which exist in complex situations (Parkhe, 1983). There needs to be a move from an emphasis on hard issues to address softer issues that can lead to a better understanding of the situation. Blalock (1982) recommends that attention be focused on a core set of questions and a reasonably small number of important variables.

Consideration was given to the use of a quantitative research strategy early in the research design phase. Survey research could have provided an alternative to the qualitative methods used in this study, but it was decided that this research would not be able to ask the types of questions necessary to assist in the development of a deeper understanding of quality in a university setting. The complexity of the topic and the unknown nature of many relationships suggested the need for an investigatory study using qualitative research methods.

Qualitative data provide rich descriptions and explanations of processes grounded in the language of the situation under study (Miles and Huberman, 1984). They allow the researcher to perceive the logical flows of information and go beyond initial frameworks to assist in developing a better understanding of a problem situation. Qualitative methods are particularly oriented towards the exploration of data sources, the discovery of patterns, and the use of inductive logic (Patton, 1987). Inductive logic is used by the researcher to observe activities and build patterns to explain the actions taking place. By looking for natural variations in the data, patterns and themes can be developed which are grounded in real world data.

Lincoln and Guba (1985) state that for qualitative research methods:

1. the real world is a set of complex systems;
2. organizational systems are structured in many ways;

3. the images of systems are created by dynamic processes of interactions in a holographic fashion;
4. future states of systems are indeterministic and unpredictable;
5. systems are continuously evolving and changing through feedback so that the concepts of cause and effect lose their meaning as new forms of systems arise spontaneously;
6. the observed structures may arise out of pressures from inside and outside the institution.

This study will use definitions of quality as gathered from interviews to assist in developing an understanding of quality.

3.2 The Qualitative Research Methodology

While the literature review has cited a variety of quality assessment processes now used by universities to measure quality, these studies have not provided insight into the way universities go about their arrangements for quality. The literature has highlighted some evaluative methods for quality, but has found little information on the mechanisms used by a university or its faculties to pursue and maintain quality.

This research builds a description of quality and derives descriptive explanations about the processes used for improving the quality of teaching, research and service.

Building explanations of why and how things occur leads to the development of grounded theory (Yin, 1989; Burns and Grove, 1993; Strauss, 1987). Exploratory studies consist of an accurate rendition of the facts found, some consideration of alternative explanations of findings, and the development of conclusions based on the single explanation that appears most congruent with the facts (Yin, 1989).

Qualitative research methods are defined as "an array of interpretive techniques to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world" (Van Maanen, 1983, p. 9). Research inquiry should develop an idiographic body of knowledge consisting of tentative statements grounded in data about a particular phenomenon (Lincoln and Guba, 1985). This creates a "thick" description (Geertz, 1973) of the particular phenomenon which is able to describe, using data and information available from the qualitative study, the complexity and internally constructed meanings appropriate to the particular situation. Qualitative studies build on the constructions and knowledge of the respondents and provide an opportunity for internal consistency that is grounded in the study context.

Qualitative research can create severe problems of data handling. This type of research generates huge amounts of data which is collected in a non-standard format

(Turner, 1983). As the nature of the research cannot be predicted in advance some may view this as a lack of rigor or structure.

In qualitative research, the issue is not one of generalization of findings as in a quantitative study, but rather one of deciding whether or not the findings of one setting are transferable to a similar setting. Contingencies can be set out to suggest when these findings may be transferable to other settings.

3.3 The University Under Study

A large western provincial university (WPU) was selected for this study on quality. It grants a wide variety of degrees including medical, masters and doctoral degrees in a wide variety of subject areas. The university has in excess of 20,000 students, of which more than 2,000 are graduate students. The university has more than 1,000 full-time teaching staff and is funded by an operating budget of more than \$200 million. The university undertakes a broad program of research, and brings in more than \$50 million to support research activities. The university has 21 faculties which can be categorized into professional (e.g., medicine, dentistry, law) and general faculties (e.g., arts, science). The other area selected for study was the central administrative unit. This university is representative of one of a class of universities in Canada which offer a broad program range up to and including doctorate degrees.

3.3.1 The Research Strategy

In developing the study objectives, a decision had to be made about the areas in which to direct the research. While the university itself may seem the logical unit of comparison, it was thought more appropriate to study faculties within the institution. Faculties are the place where the principal products of learning and research take place. While the central administrative unit coordinates planning for quality, it is the responsibility of each faculty to deliver a quality program of study or undertake and manage its research activities. Understanding what happens in one institution can assist in directing future studies on quality. Interviews were also conducted in the central administration unit to aid in understanding their broader responsibilities for quality.

In a qualitative research study, traditional methods of random sampling of the faculty members are not appropriate. Purposive sampling is used to direct the research towards people who are knowledgeable, to gain an understanding of what is occurring. Deans of every faculty in the university as well as vice-presidents of central administration and other administrative staff were sent letters (see Appendix A) requesting interviews and asking their approval to allow the researcher to contact others in their faculty about the matter under study. Additional informants were added to the sample when suggested by deans and senior administrators.

Members chosen for interviews included deans, some associate deans and department heads, university administrators and professors suggested as key informants during interviews. The number of people interviewed was less than the number contacted due to an unwillingness by some to participate. All were contacted by mail and sent an explanation of the study (Appendix B) and its objectives to read and consider.

Participants were made aware of the fact that all data would be kept strictly confidential and that the anonymity of respondents would be ensured. Potential participants were contacted by telephone and the research project explained to them. They were given an opportunity to ask questions and to decline to participate. If they agreed to participate, they were asked to sign a consent form (Appendix C).

While in the field, information was collected in the form of field notes, tape recordings, documents and other information. While field notes and tape recordings (Spradley,1980; Schwartz and Jacobs,1979) help to document the interviews, the researcher still has to make judgements on what constitutes useful information.

The twenty-one faculties were contacted, resulting in four not responding and one formal refusal; giving a response rate of 80% as shown in Table 3.3.1. The data collection continued until as many faculties as possible were persuaded to participate and interviews conducted. Faculties participating are listed in Table 3.3.2.

Faculties agreeing to interviews represent a total of 95% of all faculty members in the university, 94.1% of all undergraduate students, and 95.2% of the graduate students registered.

Access is a critical variable to any research project (Lofland and Lofland, 1983).

Access remained problematic throughout the entire period of study of the research project. Getting faculties and having access to key informants and relevant documents was a continuing issue during the field research portion of the study.

Of the 68 key informants selected for interview including deans, associate deans, department heads, administrators and other key informants. A total of 41 agreed to interviews, while 7 were not available for interview due to reasons such as on leave, or refusal to be interviewed.

Table 3.3.1

Response Rates by Faculty

Number of Faculties/Schools Responding	Faculty Response (Number)	Refusal (Number)	Response rate(%)
21	16	1	80%

Table 3.3.2

University Faculties/ Administrative Areas Interviewed

Professional Faculties or Schools	General Faculties or Schools	Central Administrative Areas and Faculties
Agriculture Architecture Dental Hygiene Education Engineering Law Medicine Music Nursing Physical Education Social Work	Arts Art Science	Central Administration Continuing Education Graduate Studies Faculty Association Student's Union
11 Faculties; 16 Respondents	3 Faculties; 12 Respondents	5 Areas; 13 Respondents

Table 3.3.3

Response Rates of Key Informants

Population Selected for Interview	Interviews Conducted	Non- response	Response Rate (%)
68	41	7	67.2%

Table 3.3.4

Survey Sample Population Frame
by University Position

Category	Number Contacted	Number Interviewed	Non-response **	%
Dean/Director	23	14*	5	77.8%
Associate Dean	11	7*		63.6
Department head	12	5	1	45.5
Professor	11	7		63.6
Senior Administrator	11	8	1	80.0
Total	68	41	7	67.2

* In two situations, interviews were held at the same time with both the dean/associate dean of the faculty

** non-response reasons include leave of absence and passed the request on to someone else in the university/faculty to respond

Table 3.3.4 outlines response rates by university position. The best response rate was from administrators, followed by deans. The lowest response rate was from department heads.

The breakdown of the sample and interviews conducted by professional, general faculties and administration areas are displayed in Table 3.3.5.

Table 3.3.5
Response By Faculty Category Type

Faculty Category	Persons Contacted	Number Interviewed	Response Rate (%)
Administrative	16	13	92.9%
General	17	12	80.0
Professional	35	16	50.0
Total	68	41	67.2

By type of category grouping, the central administrative units had the best response rate at about 93%, followed by general faculties. The poorest response to requests for interviews was from the professional faculties.

3.4 The Personal Interview

Patton (1980, p. 205) suggests that "the fundamental principle of qualitative interviews is to provide a framework within which respondents can express their own

understandings in their own terms". Intensive interviewing is in fact a guided conversation whose goal is to elicit rich information from the interviewee that can be used in qualitative analysis (Lofland and Lofland, 1984).

A tacit assumption of the interview method is that there is some sort of consensus or common knowledge of the meaning or understanding that exists in groups which is sustained over time by the social processes at work in the organization (Schwartz and Jacobs, 1979). Easterby-Smith, Thorpe and Lowe (1991) suggest that personal interviews are appropriate when it is necessary to understand the constructs the interviewee uses as a basis for their beliefs and opinions about a particular situation, or when it is important to develop an understanding of the world of the respondent, in this case their views about quality. Interviews are useful in a situation such as this where the step-by-step logic of how universities go about improving quality is not clear. To assist in the interview situation, trust is an important factor as is the professionalism of the presentation by the researcher of the purpose and goals of the research. During this study, positive comments were received from some participants about the professional nature of the initial contact and interview process used.

Interviews are a useful method of data collection due to their flexibility (Burns and Grove, 1993). They allow the researcher to explore a topic to a greater depth than with traditional survey methods. Interviews facilitate cooperation from the interviewees and allow the interviewer to elicit more information from the

respondents. The nature of personal interviews provides a higher response rate than for survey research, and allows one to collect information from those who may be unlikely to respond to a questionnaire.

Some disadvantages related to the use of interviews (Burns and Grove, 1993) are that they limit sample size due to their time and cost considerations. Subject bias is another threat to validity (Yin, 1989; Burns and Grove, 1993). Interviews are subject to problems of poor recall of subjects as well as inadequate or inaccurate articulation. There may also be inconsistent data collection from subject to subject during the interview process. An assumption must be made that the questions contained in the interview guide are in fact relevant to the topic under study (Schwartz and Jacobs, 1979). This concern of relevance exists for questionnaire based studies as well.

The range of contact time per interview session is outlined in Table 3.4. There was a wide variation in interview time ranging from 45 minutes to 3 hours, with the normal interview length about 1.25-1.5 hours.

TABLE 3.4
TABLE OF CONTACTS

Person	Range of Interview Contact Time (per person)
Deans	1-3 hrs.
Associate Deans	1-1.5 Hr.
Administrators/ counsellors	.45-1.5 Hr.
Department Heads	1-1.5 Hr.
Administration: Vice- presidents of university, other administrators	.45-1.5 Hr
Total	Range .45-3 hours

Interviews were tape recorded to assist in the data collection. This leaves the researcher free to listen and jot down notes. Transcripts of the full interviews were prepared from the tapes. Audio tape provides a useful method for the collection of quality data (Easterby-Smith, Thorpe and Lowe, 1991) and aids in listening. Taping of interviews provides an unbiased record of proceedings but taping can possibly have a negative effect on interaction. Some respondents may be intimidated by it.

Permission was requested from subjects before each interview was taped.

Gathering information in the field will have some hidden aspects (Lofland and Lofland, 1984). The researcher does not know everything and must be ready to be

surprised. The researcher does not want the subject's behaviour to be influenced by what the observer is interested in. Researchers must recognize that every subject contacted may not be able to understand the research questions in the same way that the investigator does.

3.4.1 Development of the Interview Questions

To assist in data collection and to ensure consistency, an interview guide was developed (Patton, 1980; Patton, 1987; Lofland and Lofland, 1984). It provides the interviewer with a framework for conducting the questioning. Having questions arranged in a logical order can increase the comprehensiveness of the data. Logical data gaps may be anticipated and closed. The interviewer can listen and concentrate on probes or follow-up questions. At the same time a good guide is not a completely structured set of questions (Lofland and Lofland, 1984). It allows respondents to speak freely and should not be restrictive. The guide can also provide an organized format for note-taking during the interview session.

A number of questions were developed for the structured interview guide (see Appendix C). These questions were reworked many times to develop a logical order and to ensure that the length of the interview was appropriate. Target length for interviews was no more than one and one half hours. Despite the fact that each researcher wants to touch on every area which may be even remotely associated with

the research topic, this tendency had to be controlled since the informants were busy persons. In two cases, interviews were split over two meetings, because of time constraints of participants. Some of those contacted refused to participate in the study.

Topics addressed in the interviews included the participant's understanding of what research, teaching and service are, what quality in each of these areas entails or means to each subject, what may be unique about their particular faculty, department or unit which may impact on quality or what they do to ensure quality, who is responsible for quality, what roles different people like deans, vice presidents, faculty members play in quality, barriers to quality improvement and what is now being done in their area to create an atmosphere to foster the pursuit of quality.

The interview guide was pretested in a face-to-face interview session with the dean of a faculty in another university. This assisted with the finalization of interview questions and arranging them in the appropriate order.

3.5 Research Design Questions

(Patton, 1987, p. 45) says that "there are no perfect research designs". Trade offs must be made in the research design which are necessitated by limited resources, time constraints, political considerations, and the limits of the human ability to grasp the

complex nature of social reality. Trade offs must also be made between breadth versus depth in the research design.

3.5.1 Comparison Groups

Comparison groups (Glaser and Strauss, 1967; Strauss, 1987) generated during the research allowed for the identification of the similarities and differences in the data through the categories developed. In this situation, data was categorized by faculty type; professional, general or administrative unit. The development of categories is vital to assist the researcher in their analysis and to help in developing comparisons. This assists thinking about the data and in generating concepts and relationships to identify patterns.

3.5.2 Triangulation

Triangulation is defined as the use of multiple methods in the study of some phenomenon (Denzin, 1989; Miles and Huberman, 1984). Triangulation allows one to explore multiple perspectives of the research problem to aid in the collection of a rich set of data. Burns and Grove (1993) outline five types of triangulation including theoretical triangulation using multiple perspectives to interpret data, data triangulation by interviewing different people with different perspectives, methods triangulation by using various research methods to gather different types of data, investigator triangulation using different investigators, and analysis triangulation using different analysis methods (Denzin, 1989; Lincoln and Guba, 1985; Miles and Huberman, 1984;

Gummesson, 1991; Patton, 1987). Triangulation enhances research quality by adding to the credibility of the research (Lincoln and Guba, 1985). Triangulation aids with contextual validity by assisting in the discovery of patterns of distortion in the data.

This study used three types of triangulation to assist in supporting validity:

- (1) Methods triangulation by collecting data through both interviews and from documents such as role and mission statements, teaching and research policy statements, various papers prepared for reviews of quality related issues, the collective agreement, and background statistical information;
- (2) Data triangulation by selecting a variety of people from differing faculty settings including professional and general faculties and administrative units. A wide variety of subjects were interviewed including deans and associate deans, department heads, professors, university administrators and informants from student services areas and the students' union;
- (3) Analysis triangulation by using different methods of analysis. The data was analyzed by manually coding the transcripts to identify patterns. As well, the computer text analysis program Ask Sam was used to look for patterns in the data.

3.6 Validity and Reliability

Validity means that the theory, model, concept or category describes reality with a good fit (Gummesson, 1991). Reliability can be defined as the dependability, consistency, stability, predictability and accuracy which is inherent in the findings (Lincoln and Guba, 1985). Reliability includes the accuracy of the measurement instrument over repeated measures (Chenitz and Swanson, 1986). Reliability also deals with the replicability of the study (Gummesson, 1991). If someone else had done this study using the same methods, would the same results and findings have been attained (Yin, 1989; Gummesson, 1991). Research should be conducted as if someone is looking over your shoulder (Gummesson, 1991).

Qualitative research is considered by some as more prone to bias as there are no standard decision rules or algorithms which can be used. There is no statistical validity to fall back on. The researcher must be cognizant of the following research biases (Miles and Huberman, 1984):

1. interpreting events as more organized and patterned than they are;
2. elite bias caused by the weighting of data received from high status respondents more highly and undervaluing information received from those with less prestige;
3. "going native" and losing perspective and objectivity.

To help in confirming conclusions generated from qualitative data, Miles and Huberman (1984) suggest 12 tactics to enhance reliability:

1. checking for researcher effects;
2. triangulating with different data sources;
3. checking the data for representativeness;
4. weighing the evidence and facts and deciding which data are not trustworthy;
5. looking at differences through the use of contrasts and comparisons
6. checking the outliers and investigating them more deeply;
7. using extreme situations;
8. ruling out spurious relationships;
9. replicating a finding through, for example, the use of cross-site analysis;
10. checking for rival explanations;
11. looking for negative or disconfirming evidence;
12. getting feedback from informants as to what the data really means.

The following methods were used to enhance reliability:

- (1) As only one researcher was used to collect the data, reliability concerns associated with differing skill levels of interviewers and questions being asked in different ways were not considered to be a problem;
- (2) Different types of data were used in the analysis such as interview data, various policy papers and role and mission statements. This data was collected and used to triangulate the findings where appropriate;

- (3) A broad cross-section of faculty types within the university were selected many informants contacted in an attempt to ensure that the data was representative;
- (4) To assist with the data analysis and in drawing conclusions from the data, contrasts and comparisons were drawn between three groups; professional and general faculties and central administrative areas;
- (5) Extreme situations were used to contrast, for example, between faculties suggesting that they have very good or poor processes for quality;
- (6) Another tactic used was to search through the data to look for negative evidence, contrary to the proposed patterns and then look at these more closely.

Research is not value free (Chenitz and Swanson,1986). The choice of the problem, selection of research methods, the data collected and the nature of the analysis used represents ethical decisions by the researcher. The fact that human beings construct multiple realities creates difficulties, as the researcher and the phenomenon are mutually interactive (Lincoln and Guba, 1985). Research enquiry is inherently value laden, which creates problems. When thinking about validity, questions must be asked about whether or not the evidence reflects the reality under examination (Gummesson,1991).

Validity may be threatened by historical factors that occurred before the data collection started (Denzin, 1989). Other factors are subject bias, or differences between the subjects studied versus those not studied. Reactive effects between the

researcher and those being studied can also impact on validity. Lastly is the extent to which the observer is affected by participating.

Lincoln and Guba (1988) suggest that in order to demonstrate the truth value of a piece of research, the researcher must show that he or she has adequately represented the multiple constructions of reality. There must be belief that the reconstructions developed as part of the research effort are credible. Is there sufficient detail provided, as Gummesson (1991) says, to allow the assessment of the credibility of the research methods, interpretation and answers?

Also important to reliability of findings (Lincoln and Guba, 1985) are the applicability of the findings other contexts or with other subjects; the consistency as to whether the study be replicated in a similar context with new respondents; and the neutrality of the research as to whether it is possible to determine the degree to which findings are determined by the respondents and the conditions of the study rather than the perspectives of the researcher.

In chapter 4, the findings are presented in summarized form, often in the words of the informant to allow the reader to come to their own conclusions about the data.

Providing detailed data allows those reading the dissertation to undertake their own assessment of the findings reported and aids in creating an audit trail.

3.7 Ethical Considerations

Before the data collection was undertaken, the research methodology was reviewed by the research ethics committee of the Faculty of Management, University of Manitoba who conducted an in-depth assessment of ethical and other related considerations.

This committee asked a number of detailed questions and required certain assurances to ensure confidentiality. After a thorough review, this committee gave their approval in November of 1992.

Each respondent was given a consent form to sign that had been reviewed by the Ethics Review Committee of the Faculty of Management (Appendix C). Respondents were informed about the study objectives and their time commitment requirement and asked to sign a consent form. Participants were allowed to withdraw from the study at any time, although none did. Confidentiality was ensured as surveys, field notes and tapes were only identified by code number. The code numbers and names were kept separate. After a ten year period, the field notes will be destroyed and tapes erased. A copy of the summary findings of this study will be forwarded to participants at the end of the study.

3.8 Conclusions

The qualitative study methodology has allowed collection of data on quality processes within university faculties in as unbiased a manner as possible. Table 3.8 summarizes a number of things which were done to increase validity and reliability. With the above considerations in mind, the author of this thesis set about the tasks of interviewing respondents and analysing the data.

Table 3.8

Methods Used to Increase Reliability

Reliability Area	Action Taken
Comparison Groups	data reported by three comparison groups; professional faculties, general faculties and administrative units to assist in seeing patterns between areas
Elite Bias	the interview data was stripped of identifiers during analysis so that it was not possible to know the identity of subjects during analysis
Data Analysis	tables were developed to summarize and organize information; transcripts of the interviews were prepared and a computer used to assist with the analysis
Rich Data	different sources of data were used such as interview transcripts and policy statements
Sampling Broadly	a broad cross section of faculty members and administrators were selected for interviews
Identifying Outliers	faculties which identified themselves as having good or poor quality practices were given more attention
Present a Chain of Evidence	the data were displayed in tables to allow those reading to see all of the evidence, this assists with credibility
Validity	this research used a common interview guide and contacted comparable faculty or administrative groups from within the same university
Reliability	this is assisted by making it clear as to the applicability of findings, consistency of findings and by presenting a logical set of conclusions which have been developed from the data

4.0 DESCRIPTION OF THE DATA

4.1 Introduction

This chapter will discuss the interview data collected during the interviews. General comments will be provided on what was found as the interview data was organized and analyzed. Techniques taken from Miles and Huberman (1984) were used to generate tables describing salient findings.

The interview data was arranged in a tabular format to assist with the analysis and identification of findings. Information was displayed by type of faculty, either a professional faculty, a general faculty or an administrative area. This chapter reports on the findings and will identify critical factors for quality reflected on by university personnel in the interview sessions.

There may be some redundancy and duplication of responses listed in the tables but wherever possible, similar responses were combined to eliminate the reporting of duplicate responses. The data in the tables was taken from the transcripts on a question by question basis, and may be paraphrased to some extent. Most words have been left in to portray the meaning as closely as possible to the original statement. This data is reported to assist in developing an audit trail to demonstrate key points to readers (Lincoln and Guba, 1985).

Data on all of the interview questions is included for information (see appendix D for a copy of the interview guide used). The questions used for information gathering included the following:

1. Definitions of quality in teaching, research and service;
2. Responsibilities and leadership for quality;
3. Climate influencing quality in a university such as politics, culture, type of faculty and resources;
4. Barriers to quality;
5. Measures used to assess teaching, research and service quality;
6. Activities undertaken to maintain and improve quality in teaching, research and service activities.

Qualitative research is complex to analyze as the researcher does not have the inherent structure and statistical framework of quantitative research methods to fall back on. The analysis used a variety of coding schemes to reorganize and group the data to look for patterns.

The next section will summarize the definitions for quality reported in the interviews.

4.2 Definitions of Quality in a University

The definitions of quality have been subdivided into the three main areas of activity; definitions pertaining to teaching, definitions pertaining to research and definitions pertaining to service. There are two quotations which are of particular interest as they provide a general setting for this section on the definition of quality. One is that "the university as an institution has a certain perception of what is good, what is less good and what is bad" (senior university administrator). This quotation is important as it strikes at the factor of measurability of quality, and the inherent belief of some who were interviewed that universities are organized in a systematic way to create quality. Quality is subject to Garvin's (1984) transcendent definition that everyone in the university knows what quality is, even if it cannot be clearly defined.

The other quotation suggests that "you might describe the university as a community of scholars at various stages of sophistication or development....those who are learning and those who are still learning" (general faculty professor). This is interesting as it suggests a link between the teaching function, where students are gaining knowledge and the research function, where professors are gaining knowledge; mirror image processes.

4.2.1 Definition of Quality in Teaching

Teaching includes "the activities under the collective agreement where a teacher is in front of the students, supervising student teachers, graduate students, having proper programs in place, programs that reflect the state of the discipline" (professional faculty, dean). The quality problem was stated by a senior administrator as "to me what we are talking about is quality, the quality of the educational experience.... there are some people who are good researchers, but need some help in the classroom."

Definitions of Quality in Professional Faculties

Table 4.2.1 presents data on the definition of quality in teaching as commented on by professional faculties, general faculties and the central administration area. In summary, professional faculties tend to define quality as accurately accomplished goals or carefully defined objectives, the level of student satisfaction, and the course content and content delivery.

Other personal types of factors cited as important to quality include modulating your voice, being exciting and innovative and being affectively warm rather than affectively cold, creating a stimulating and fun environment where students want to learn more, establishing a healthy adult educational milieu where certain beliefs or pedagogies are followed and the development of a climate supportive of research and teaching with a maximum of resources and a minimum of interference from administration areas.

Table 4.2.1

Definition of Quality in Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Have you accurately accomplished the specified goals. -define objectives to change behaviour, knowledge, skills. -Includes the affective, cognitive and behavioral domains. -Satisfaction of students. -Content and content delivery. -Above the minimum level on student surveys. -Achieves the criteria, whatever they are. -Modulating your voice, eye contact. -Being affectively warm, rather than affectively cold. -Being cognitively demanding. -Being exciting, innovative. -Creativity is noticed, rewarded in faculty members. -A stimulating and fun environment, students want more. -A healthy adult educational milieu, where certain beliefs and pedagogy is followed. 	<ul style="list-style-type: none"> -If it enhances the university, it must be high quality. -An excellent teacher gets/creates an excellent reputation, Both inside/outside the university. -A professor who educates the future people of our society well. -Quality is defined by the degree of local/national success of faculty member's work. 	<ul style="list-style-type: none"> -Teaching outcomes. -Providing people with value. -Good student ratings. -No complaints about a teacher. -A teacher who uses the full range of marks available to them. -Students from lower classes go on to graduate school or major in the area. -"The university as an institution has a certain perception of what is good, what is less good, and what is bad." -Providing the training that is useful to individuals. -A good professor is one who can teach, rather than an emphasis on a publish or perish attitude. -The student's perception they have attained something or assisted in attaining a goal they have had, whether career oriented or more personal.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.2.1

Definition of Quality in Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -A climate where faculty can pursue their research/teaching with a minimum of interference from the administration and a maximum of resources available. -Level of expert knowledge of the professor. -Having pedagogical skills. -Awareness of teaching strategies. -Excellence in the maintenance of body of knowledge. -Above the demarcation of a minimum level of performance. -Having proper programs in place which reflect the state of the discipline. -Using different types of instructional methods. -Having objectives in your course outline, sticking to them. -Telling students when assignments are due. -Vaguely defined in the collective agreement. -Above the minimum level. 	<ul style="list-style-type: none"> -The number of professors teaching elsewhere who were trained in part by the department. -Quality teaching is by the judgement of those who are recipients of the teaching process - namely the students. -Each faculty member voicing their own success in different ways, so student move through the program with a wider breadth of experiences. -Recruiting of quality students. 	<ul style="list-style-type: none"> -Providing people with value in all aspects of the program, needs were met or exceeded. -Provide the best service to students and employees to meet their needs. -Quality is in the eyes of the receiver. -Quality has to do with the consumer, the individual, the student. -The ultimate arbiters of quality are the students. - does what they have been through enable them to meet their objectives. -Good learning environment. -A whole process, everything from identifying people to sit on advisory committees, to evaluations, quality of learning material. -Effective pedagogy. -Up-to-date material. -Relevant material. -Appropriate needs related to the workplace as well as personal development issues are developed. -Includes program development, as well as classroom teaching. -The transmission of knowledge to students in the most effective way to ensure the students are learning and growing and maximizing their capability in a particular subject area. -Having access to the professor. -Being taught how to apply the material and think.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Additional quality factors include the pedagogical skills and expert knowledge of professors, their awareness of teaching strategies, the professor's excellence in maintenance of the body of knowledge, whether or not a faculty has specific programs in place which reflect the state of the discipline and may include the mention of quality in the collective agreement as being above the minimum level or achieving the established criteria, whatever they may be.

General Faculties

General faculties suggested several salient definitions of quality in teaching including one comment that if teaching enhances the university in some way, it must be of high quality, an excellent teacher is one who creates an excellent reputation both inside and outside of the university, a quality professor is one who educates the future people of our society well, and quality is having a number of professors teaching elsewhere who were trained in part by the department. Some suggest that quality in teaching is best expressed in the judgement of those who are recipients of the teaching process, namely the students.

Other factors defining quality in the teaching process include allowing each faculty member the opportunity for doing things in different ways so students gain a wider breadth of experiences, and in recruiting quality students for the faculty.

Central Administrative Areas

The central administrative unit describes a number of salient areas for quality in teaching including receiving good student ratings on evaluations, no complaints about a teacher being received by faculty administrators, having undergraduate students go on to graduate school or to major in the program area, teachers using the full range of marks available to them, providing people with value from their courses and providing the training that is useful to individuals or where students perceive that they have achieved a goal or at least attained something. A good professor is cited as one who can teach well, rather than one who places their emphasis on a publish or perish attitude.

Important to the definition of quality in teaching are factors such as quality being in the eyes of the receiver and the fact that the ultimate arbitrators of quality are the students, or the receivers of the teaching activity who have had their needs met. Also important to teaching quality is the creation of a good learning environment. Quality includes the whole of the teaching process including everything from having quality people available to sit on course advisory committees, conducting program evaluations and having quality learning material. Also important is the requirement to provide proper value in all aspects of the program to meet or exceed the needs of students.

Effective pedagogical methods, having up-to-date and relevant teaching material, and meeting needs related to the workplace as well as the personal development needs of

students are also critical to teaching quality. Also important to quality is the transmission of knowledge in the most effective way to ensure that students are learning, growing and maximizing their capabilities in a particular subject area and having access to the professor and whether or not the student is taught to think and apply the material.

4.2.2 Definition of Quality in Research

Some of the definitions concerning quality in research are described by the following quotes received during interviews with informants from general faculties. One department head stated "I think I might have some ideas about how to appraise the quality of published research.... when I have been asked to be a referee, I think I know how to go about telling them whether or not it's well worked out, whether it's wrong.... whether it's been done already." A professor from a general faculty stated "the touchstone of what is quality research is research which has been found to be acceptable by the judgment of people who are qualified to make that judgement, and that's usually your peers." Summary information concerning quality definitions of research are shown in Table 4.2.2.

Professional Faculties

Professional faculties have a number of definitions for research quality such as bringing international recognition to the faculty, building on the current body of knowledge, pushing back the frontiers of knowledge, making a substantial contribution

to the discipline or doing something that is original, doing research that is useful, and finding new applications for existing knowledge. Quality research, it was suggested, is highly innovative and creative.

Other factors associated with quality in research include maintaining currency in methodologies and concerns over the capacity of faculty members to conduct research. These factors also pertain to scholarly activities as well as participation on editorial boards of journals and innovation in research allowing us to adapt traditional paradigms to new areas of endeavour.

Table 4.2.2

Definition of Quality in Research

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Bring international recognition to the faculty. -Building on the current body of theory. -Makes a substantial contribution to the discipline. -Pushing back the frontiers of knowledge. -Must be based on objective and semi-objective criteria upon which we can measure quality. -Doing something that is original. -Finding new applications of existing knowledge. -Quality is a measure of creativity, high quality is highly creative. -Research that is useful. -Maintaining currency in research methodologies and in terms of the literature. -Contains scholarly activities such as publication, participation on editorial boards of journals, creative scholarly work, development of course material, innovation in research to adapt traditional orthodox paradigms to new areas. -The capacity of the faculty members to conduct research. 	<ul style="list-style-type: none"> -Tied to output. -Shown to be worthwhile. -What counts is a contribution to knowledge. -The research is helping the world. -The wider the publication impact, the more significant the research. -Research that is vigorous, enthusiastic and extremely professional. -Recognized nationally/internationally/regionally. -There are well established procedures followed, people know whether it is good or not, and whether it should be published. -Research is a means, scholarship is an end. -Scholarship is general acquisition and pondering/study...deep insightful knowledge. -The criteria by which people advance in their careers. -Material which is refereed in some way. -Research found to be acceptable by the judgement of persons qualified to make that judgement - your peers. 	<ul style="list-style-type: none"> -Research that feeds back into programs. -Research that is current. -Research that is well received. -Research that results in more expertise or knowledge to be passed on to students. -Published in refereed journals. -Receiving research grants. -Being asked to speak elsewhere. -Being asked to write chapters in books. -Acceptable to those who give grants. -Having the proper skills as a researcher. -Peer review, rigorously reviewed. The ultimate arbitrators are the peers, that is fundamental to academic research. -Well thought out, planned and executed. -Theoretical research, lab research, survey research, writing texts, creative theoretical books, organizing conferences and running a journal are all ways to do research.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

General Faculties

Research quality includes conducting research which is worthwhile and contributes to our knowledge, research that helps the world, research that is rigorous and enthusiastic and extremely professional and research which is recognized nationally and internationally as well as regionally. Quality research is highly creative and has a wide publication impact. Quality research follows established procedures, is refereed in some way and found to be acceptable by the judgement of peers.

Administrative Areas

Administrative areas defined quality research as that which is current and well received, research that results in more expertise and knowledge being passed on to students, research that feeds back into programs, research which is published in refereed journals or acceptable to those who give grants. Quality research is rigorously reviewed and well planned and executed and is research where the researcher has the appropriate skills.

These points represent salient elements pertaining to the definition of quality in research.

4.2.3 Definition of Quality in Service

The summary points concerning service are shown in Table 4.2.3.

Professional Faculties

Professional faculties suggest that quality service activities include the ability to translate the act of scholarship to the special circumstances of your clientele, the transferring of technology or knowledge to non-expert clientele or to a setting where it has meaning and utility and the enhancement of the well-being and prestige of the university or the cultivation of a healthy, scientific and technical society.

Service can be both internal or external to the university, or service to the profession and includes service to the community at large or to national and international bodies. Service is seen as an enabling and secondary activity in universities and includes the nourishment of the profession itself.

General Faculties

General faculties define quality in service as the professional reputation of a faculty, best measured by those who are the observers or receivers of the service that is being delivered. Quality service is that which colleagues see as being of value. If service is not considered of value by those who receive it, then by definition it is not quality service.

Additional definitions included a comment and qualifying statement that the value of the service depends to some extent on where you sit. Some of those interviewed did not value participation in academic service or think that it is for everyone in the academic world.

Central Administrative Areas

Administrative definitions of quality of service include a statement that quality service is whatever you are doing that is presenting the university in a positive light. It involves those situations where the special expertise of the university is employed and translated or transmitted into another context. It was suggested that administrative service on committees makes the university work.

Table 4.23

Definition of Quality in Service

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Ability to translate state of the art scholarship to the special circumstances of your clientele. -Transfer of technology, ie. a set of circumstances that is unique. -Transferring knowledge to non-expert clientele and to a setting where it has meaning and utility. -Doing a lot of consulting work, and making a lot of money on it. -Enhancement of the well being/prestige of the university. -Service to national/international bodies. -Cultivation of a healthy, scientific and technical society. -Service can be internal to the university, external or service in the profession. -Includes service to the community and to the university at large. -Is an enabling and secondary activity. -Includes the nourishment of the profession. -Enabling other functions, the licensing of professionals, protection of the public, contribution to society through continuing education. 	<ul style="list-style-type: none"> -Colleagues see it as of value. -The professional reputation. -Best measures by those who are the observers or receivers of the service that is being delivered. -The value of service depends on where you sit, some people value it higher than others. -Do not think service is something for everyone in the academic world. 	<ul style="list-style-type: none"> -Whatever you do, is presenting the university in a positive light. -The special expertise of the university is used and exported to another context. -People who are really good are donating time. -Administrative service on committees makes the university work. -The quality of service that is provided to the students. -The student is a customer or client, and needs to get the best experience possible.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

4.3 Responsibilities for Quality

This group of interview questions dealt with two important areas. The first centred around who has the responsibility for quality leadership in the institution, and what should be done both inside and outside the faculty to improve quality. Leadership was reviewed both from the perspective of internal to the faculty and from the university viewpoint.

One respondent likened "the dean's role as herding cats. There is a very bright group of people with high independence needs so they resist anything standardized" (dean, professional faculty). In terms of the responsibilities for quality leadership, "I am looking for somebody who has the confidence of their faculty members...one of the best indicators of whether they can provide leadership because academics tend to be prima donnas" (dean, general faculty).

4.3.1 Responsibilities of Various Groups or Individuals for Quality Leadership

The summary quotes of respondents are shown in Table 4.3.1.

Professional Faculties

Professional faculties were seen to have their leadership emanating internally from the dean, and descending down through associate deans to unit heads and then to the individual faculty members. Quality has to be evidenced throughout faculties, with department heads creating an environment for quality. University groups with important roles to play in quality include the faculty association/ unions and the administrative units.

Part of the responsibility for quality in some professional faculties is seen to arise from their concern of acting as a profession. While it was seen to be important to have some central administrative support and guidelines for quality, a fair amount of autonomy in this area was seen to be a critical factor as well. It still rests with the disciplines themselves to judge the impact and quality of research work. Some believed that the central administrative area has a role to play in evaluating quality. Others interviewed expressed the belief that quality is a collective exercise with everyone being responsible for its implementation.

Table 4.3.1
Responsibility for Quality Leadership

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -starts from the dean, the dean working with unit heads. -needs commitment from each individual faculty member. -link from deans to associate deans to faculty members. -the responsibility lies with each particular unit. -we must be honest with our peers about their performance. -department heads must create an environment with the proper morale and teamwork. -comes from the concern of acting as a profession. 	<ul style="list-style-type: none"> -people are professional academics and quality is a question of professional pride. -the head of the unit/dean sets expectations and encourages. -individuals are totally responsible for their teaching and research. -the departmental component for quality includes cohesiveness, leadership and committees. -for teaching, the head as well as professors recognized as good take the lead. -professors must be self motivated and are quasi-independent, it lies with the people themselves. -research lies with the unit heads - they must lead by doing and enlist the loyalty and support of colleagues. -graduate students are often the best teachers, they are closer to the students -vice-president academic articulates values and goals. -select good students. -need to get quality people in the system. - unlimited enrolment faculties have problems. 	<ul style="list-style-type: none"> -deans have the responsibility. -the responsibility is at the unit level. -the deans primarily but it goes down the pyramid, a shared responsibility. -the responsibility is with all faculty members. -all senior managers. -all faculties have a responsibility - but central administration has the responsibility to critique. -central administration makes the long range decisions - focusing on what the university is good at.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.3.1

Responsibility for Quality Leadership

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -from the faculty association/union as well as the administration. -central administration support with some guidelines, but you need a fair amount of autonomy. -lies with disciplines to judge impact and quality of research. -board of governors. -the administration has a job to evaluate performance. -client groups evaluate service. -with everyone, all are responsible, quality is a collective exercise. -from the top and the bottom of the university. 	<ul style="list-style-type: none"> -senate is a waste of time. -the president has too many tasks to be a leader. -hierarchial levels can encourage quality. -departments must protect students from bad teachers. -the faculty association should assist in quality, but they are useless, no leadership shown. -quality must be a commonly held goal in the system, but not in terms of one person. - there has to be collective values, rather than leadership. -from the top down. -service is difficult, is there a role for anyone other than individual? 	<ul style="list-style-type: none"> -senate and the board of governors. -the central administration provides the leadership. -the president's office (includes vice-presidents) and deans, department heads and faculty. -from an institutional view the Senate, Board of Governors and the President's office. -with everybody.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

General Faculties

General faculties had a belief that for academics, quality is more a question of professional pride. While the head of the unit or the dean can set an example or encourage quality improvement, individuals are totally responsible for their own teaching and research. The departmental component for quality includes the cohesiveness of leadership direction, often accomplished through committees for teaching quality. It was recognized that those who have been identified as good should take the lead responsibility for quality. Unit heads must take the lead and set an example for quality of research, and be able to enlist the support and loyalty of colleagues. There needs to be safeguards to protect students from bad teachers. Interesting to note was that some believed that graduate students, closer in age to students, make the best teachers. Expressed was a need to get quality people into the university system to help improve quality.

Externally, the vice-president academic can articulate values and goals for quality as the president is often too busy to be a leader. Quality must be a commonly held goal by all members of the system. There needs to be collective values of faculty members focused on quality; this is more important than leadership.

Administrative Areas

Administrators suggest that leadership for quality is primarily the responsibility of the dean and centred at the unit level. Responsibility must move down through the organizational pyramid and be shared by all faculty members.

While all faculties have a measure of responsibility for quality, central administrative units believed that they have the sole responsibility to critique faculties on their quality performance. Central administrative areas also make long range decisions, focusing on what the university is good at and providing leadership and direction for quality.

4.3.2 The Involvement of People in Quality Improvement: What Should Be Done

Respondent quotations are summarized in Table 4.3.2.

Professional Faculties

This question investigated the involvement of people in improving quality in faculties. Some important comments from professional faculties related to the role of the dean in demonstrating leadership and in setting values for a quality program. Deans must inject excitement and enthusiasm into their faculties. While faculty members have their own goals and research needs, there needs to be a commitment to quality in education. In the past, much of the focus on quality has been directed at the research function. While the president articulates the behaviours he/she wants the university to

represent, everyone has to assume some responsibility for quality. Students also have a role to play and must be allowed to provide input on how to improve teaching quality.

The attitudes of faculty members towards quality are critical. It was suggested that quality depends to some extent on the "metabolism" of people. There are what can be termed "good" people and there are "less good" people. Faculty members must be able to define excellence in their own discipline. Professors must be aware of the criteria for quality.

Much of what happens in faculties is accomplished through the auspices of committees, which it was suggested often perform at the level of their least performing member. The "real work" as expressed by some is at the level of the interaction of students and faculty members, with everyone else's role as supportive to this effort.

Table 4.3.2

People Involvement in Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -the dean has values for a quality program and plays a leadership role. -faculty have their own goals and research needs. There needs to be a commitment to quality in education, they must value teaching but the focus has been directed at research. -shared leadership is important. -the president models the behaviours he wants the university to represent. -everyone has to assume some responsibility. -executive of department is the most important, they must be on-side and committed to excellence. -quality depends on a metabolism of people, there are good people and there are less good. -faculty members need pride in quality of their work. -deans must inject excitement and enthusiasm, attitudes are critical. -the president ensures the overall mission and sets the tone, they must put the university's interest front and centre. -vice-president academic is a more direct influence on quality who needs to let faculties know if they are achieving at an acceptable level, and put in place mechanism to monitor quality. -employers have a role to play with quality. 	<ul style="list-style-type: none"> -there should be external standards, everything is governed by chance. -the role of administration has to be less mysterious. -quality has to be monitored at the lowest level if there are good selection criteria for hiring, then every staff member hired should be high quality. -more of an emphasis on quality is needed. 	<ul style="list-style-type: none"> -have to pull vested interests together. -everyone from the top down to the student is responsible for quality, we all have a collective responsibility. -we should be more consumer oriented, students should be on committees and listened to. -the president sets the priorities, the vice-president academic must ensure staff are meeting standards, deans advocate for quality and professors work to help students.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.3.2
People Involvement in Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -organizations representing professional organizations have a role to play. -willingness to fund initiatives in the direction of quality is important. -need support and resources to enable quality. -administrative areas must take a role in setting direction. -the administration is in a better position to define with expert assistance what excellence in teaching is. -committees perform at "the level of their least performing member". -academic faculty should be allowed to decide on excellence in their discipline. -the real work is at the level of the interaction of students and faculty members who are generating research questions, everyone else's role is to support this effort. -criteria should not become straight jackets. -we should leave it to the particular discipline to adjudicate what is quality. -students are a diverse lot but as a body, they are not always committed. -students must be allowed input and treated respectfully. -faculty members need to know what the criteria are and what they are to be held accountable for. 	<ul style="list-style-type: none"> -there needs to be more of an emphasis on quality in teaching. -most important is when the professor meets the students, the administrative role is supportive but not fundamental. 	<ul style="list-style-type: none"> -strong leadership needed from central administration. -centralization - decentralization can have an impact on quality and needs monitoring. -needs to be strong direction from central administration to the deans, there is a chain of responsibility.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

While the president sets the tone and ensures that the overall mission of the institution is established and clear, the vice-president academic has a more direct influence on quality and has to let faculties know if they are achieving at an acceptable level, by putting in place mechanisms to monitor quality, or by showing a willingness to fund initiatives in the direction of quality. Administrators also aid in setting the direction for quality, since they are in a better position to define with the help of expert opinion what constitutes quality in teaching. Employers have an important role to play in quality as do professional organizations. It was stressed that quality criteria should not become straight jackets, restricting activities.

General Faculties

General faculties believed that there must be more of an emphasis on quality, especially in teaching. The most important interaction is when the professor meets the students. The administrative role is supportive but not the fundamental one. One comment concerned the need for standards, as everything at the present time is governed by chance. It was also believed that by having good selection criteria for hiring, the general level of quality could rise as every staff member hired would then be of high quality.

Administrative Areas

Administrators have a role to play in pulling vested interests together, as everyone including students have an interest in quality. It was suggested that the concerns of

students should be taken into consideration more often. Central administration has to provide strong leadership for quality, and give direction to deans, who then advocate for quality in the faculties. There is a chain of responsibility which is important to understand.

4.4 Some Important Factors Influencing Quality in a University

This section discusses the feedback pertaining to how the type of faculty, either professional or general may play a role in quality, the role of organizational politics in impacting on quality improvement and finally how the culture or ethos of a particular faculty may aid or inhibit quality.

4.4.1 Type of Faculty Influence On Quality

The quotations of respondents are summarized in Table 4.4.1.

Professional Faculties

This question asked interview participants to identify the way their faculty may influence quality. Professional faculties were influenced by their professional organizations who constantly act as a jury assessing the curriculum and the quality of

graduates and holding them accountable for their actions. This level of criticism was not believed to be in place for the core or general faculties such as Arts and Science. In professional faculties, some faculty members have reduced teaching loads due to their greater responsibilities for research. There was a concern brought forward as to whether the university is the right setting in which to offer professional programs.

Professional faculties have to regularly liaise with industry, government and the public. This exposes them to external standards and to other ways of doing things outside of the university setting. This may require faster quality improvement as part of their professional responsibilities. The area of practice in professions is seen as adding a new dimension, not present in core faculties. There is often a responsibility to protect the public and ensure that all graduates sent out to practice are competent to do so. The type of teaching, research and clinical activities which occur, as well as their types of graduates, is seen as leading to a different role for these faculties. The significant service role of professional faculties provides a different role with respect to their quality needs and this external contact requires faculties to be relevant. Professional faculties are believed to be more concerned about their discipline than a general faculty may be.

General Faculties

General faculties are often required to provide service courses to professional faculties and pay the associated costs for these courses, reducing the resources available for

other faculty needs. There needs to be a balancing of external demands for service to internal faculty needs. It was suggested that while professional faculties may do different types of work than general faculties, for example practice of the profession may play an important role, it was not believed that their type of work influenced quality. Faculties which produce a lot of published research were believed to have a better ability to appraise their quality than those with little in the way of published research output. While publishing was valued more highly in some areas than in others, it was seen as important to the assessment of quality. There was some thought that the research work of some faculties belongs more outside the university than inside it. As some research may be more fashionable than others, research dollars from grants were not seen to be necessarily a good proxy for quality.

Table 4.4.1

Type of Faculty Influence on Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -some faculties have a greater responsibility for research programs which results in reduced teaching loads. -now, new staff must take on more courses than in the past, which is more difficult for them. -professors in professional faculties may interface more with industry, government and other professors. You see other standards and this allows for faster adaptation. -while work often overlaps service roles which are externally grounded in the real world, this can be an excuse for not getting down to the business of quality. -the whole area of quality of practice in a profession is different. The type of teaching and research and graduates are different. -The type of faculty creates a multiplicity of job descriptions. -The practice of the profession is important, it includes the preparation of people as well as the study of the practice. -In professional faculties, you are more concerned about the professional discipline and theoretical structures related to it. 	<ul style="list-style-type: none"> -Deans of faculties must be like pirates, the must fight for dollars. -The measures used for quality in professional faculties are different from those use in general faculties. -The type of faculty has no influence on the quality measures. -While the type of faculty has a bearing on the type of work done, faculty type does not influence quality. -The professional faculties make demands for service courses that we must meet and pay the costs of the other faculty's programs. 	<ul style="list-style-type: none"> -In smaller faculties there is more comradeship, they take care of their students better and there is better quality. -Smaller faculties also have more latitude over entrance requirements, they can be more selective. -Larger faculties have less control over entry than professional faculties who control their entry. -Some parts of the university are in competition with the private sector.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.4.1

Type of Faculty Influence on Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<p>-Professional faculties have a jury watching of active and powerful professional organizations that constantly assess their curriculum and graduates, this level of criticism does not exist for core faculties.</p> <p>-there is a question as to whether all professional programs belong under the university, or elsewhere.</p> <p>-Core faculties are less accountable externally, and have less reason to be pushed to be excellent.</p> <p>-Professional faculties are more likely to insist collectively on standards and measures.</p> <p>-The majority of graduates are destined to practice, and there is a built in system of feedback from employers.</p> <p>-There is an enhanced responsibility to serve the public and protect them.</p> <p>-Standards must be maintained and objectives adhered to. We need evaluation mechanisms.</p> <p>-External recruiting pushes faculty members to be relevant.</p> <p>-Licensing bodies are independent and provide feedback. If there is no licensing, the onus is on the faculty to prepare the students.</p> <p>-Isolation between faculties is a problem, there are no linkages as units are independent. This can cause many problems.</p>	<p>-The work of some professional faculties belongs more outside the university.</p> <p>-Publishing is valued more highly in some areas than others.</p> <p>-the value of general these faculties is sometimes hard to measure.</p> <p>-The easiest thing to appraise is published research, and where there is a lot of publishing, the faculty is better able to appraise quality.</p> <p>-Some types of research is more fashionable than others, so research dollars are not necessarily a good proxy.</p> <p>-Needs external to the faculty must be balanced with those internal to the faculty.</p>	<p>-Some disciplines may get more favoured treatment, and that may impact on quality.</p> <p>-You need the necessary resources and that should give reasonable quality.</p> <p>-Professional faculties must ensure professional suitability, and must respond to external demands.</p> <p>-Different types of evaluation systems are needed for different types of faculties.</p>

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Administrative Areas

Administrators outline the need for rigorous program standards and graduating requirements to assist in ensuring quality. Smaller faculties were seen to have an easier time to maintain quality. They have more latitude to control entrance requirements by being selective and using pre-screening than do large faculties. Another problematic area was that some faculties may be given more favoured treatment than others by the central administration area and that may impact on quality. One important comment made was that different types of faculties need different types of evaluation systems, to match the variety of scholarly endeavours which are undertaken.

4.4.2 Organizational Politics

Summary quotations concerning the effect of organizational politics are shown in Table 4.4.2. Politics are seen as creating "a sense of territoriality which is acted out in the politics that leads to less cooperation between the units of the organization than one might like to see" (senior administrator). A dean of a professional faculty suggested that "organizational politics are a fact of life in organizations, especially if you define organizational politics as the efforts by individuals and groups to ensure their policy preferences are those chosen by the decision-making powers of the organization".

Table 4.4.2

Organizational Politics

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<p>-there needs to be an acceptance or understanding about programs that all are relevant.</p> <p>-if administrative roles start taking a precedence over the mission of the university, that is destructive. We waste effort on administrative issues, rather than the actual mission.</p> <p>-most things happen because there is some agreement that they should happen.</p> <p>-participatory decision-making is a standard way of doing things, leading to mutually agreed to decisions, an open and collective style.</p> <p>-there is a general suspicion of the quality of performance appraisals and that they could be used arbitrarily or ruthlessly.</p>	<p>-things are rigidly structured in terms of different committees which provide advice.</p> <p>-politics are not necessarily negative, they are associated with power, which may interfere with quality.</p> <p>-decisions are now made largely by committee.</p> <p>-departments are fighting for dollars and the dean must decide on priorities, you have to make the best case.</p> <p>-while the use of committees does not eliminate politics, it reduces their impact.</p> <p>-the university does not have a political constituency to lobby for it.</p>	<p>-there are politics at higher levels, in budgeting.</p> <p>-there are politics involved in collective agreements, there is a lack of reasonableness and collegiality.</p> <p>-sometimes politics provide an opportunity to enhance quality, but in other ways they cause inter-jurisdictional difficulties.</p> <p>-there is politics about the way faculties feel they are treated by central administration.</p> <p>-the decentralization of power enhances quality.</p> <p>-often there are power struggles between units, but there is no recourse to appeal.</p> <p>-deans have a great deal of power.</p>

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.4.2
Organizational Politics

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<p>-if you have a large consensus on values and norms you need few rules, as everyone has internalized them, when this is not the case, you have to write them down.</p> <p>-units get into a survival modes these days, competing with each other.</p> <p>-you need to be able to take courses across faculty units more easily. All units want to maintain their own internal integrity but it creates problems and reduces efficiency.</p> <p>-the university has the freedom to make decisions, but there is a great deal of politics involved. People are often afraid to make these decisions.</p> <p>-often this issue comes back to personalities and personal style.</p> <p>-petty jealousies always get in the way.</p> <p>-small "p" political factors do not produce what is needed.</p>	<p>-institutional politics are not necessarily undesirable, it involves the exercise of power and people who have this power do not always exercise it in a selfless way.</p> <p>-if people are given the opportunity to say their piece, they feel they have contributed and respect the decision.</p> <p>-not like a political party where there is a goal, people just do it for personal reasons.</p> <p>-in larger groups, there is less allowance for organizational politics, it becomes the tyranny of the majority.</p>	<p>-the university has the freedom to make decisions, with a great deal of politics involved in each decision, but people are afraid to make decisions. The university is very political.</p> <p>-these are the notions one faculty has about another, such as a professional degree is not as good or academic as others.</p> <p>-if groups are fractionalized, they compete for resources.</p> <p>-politics lead to a lack of trust, this has negative impact on mission.</p>

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.4.2

Organizational Politics

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -you need to work in a collegial manner, as allies. -politics hinder quality when everyone is looking out for their own interests. -heads of departments are territorial and protect their turf. -not everyone shares the culture and objectives of the dean, this is a fact of life and hard to change. -in professional faculties, there is a division of cultures. Some whose orientation is scholarly and those whose orientation is the profession. This can lead to an unwillingness to set unit priorities. -there is an aging professorate with a diminished interest in research. -There are redundancies across the campus, but politics prevents us from addressing these. -there is tremendous politicking over declining 	<ul style="list-style-type: none"> -the presentation of self is critical in the political game. -departments are fragmented, there are often many different power groups and personalities. -it is often seen in petty stuff and internal bickering between groups. 	<ul style="list-style-type: none"> -the union is always confrontational and this flies in the face of collegiality. -politics are part of the culture. -organizational politics affects quality when people act detrimentally. -if people are fractionalized and competitive for resources, that is not helpful.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Professional Faculties

Professional faculties see organizational politics as having a general influence through the tremendous politicking over resources and the petty jealousies that occur on account of this. Often, small "p" political factors are seen to not produce what is needed in the faculty. Organizational politics may hinder quality activities in situations where everyone is busy looking out for their own interests. Often the issue of organizational politics comes down to issues of personalities and personal style.

Participatory decision-making is a standard way of doing things in universities. This leads to an open and collective decision-making style. If you have a consensus on values and norms throughout the faculty, you need few rules as everyone has internalized them. When this is not the case, however, you need to write these rules down. In cases when times are bad, units will often go into a survival mode, and spend a great deal of time competing with each other. Not everyone in a faculty shares the same culture and objectives of the dean. In professional faculties, there is often a division of cultures. Some members may have a scholarly orientation, while others are more interested in the profession and its practice. This can lead to an unwillingness to set unit priorities. There may be redundancies across campus between faculties offering similar programs, and organizational politics often prevents the addressing of them.

General Faculties

General faculties have committees to provide advice and assistance in setting direction. While this does not eliminate politics, it reduces their impact. In larger faculties, however, it is believed that there may be less allowance for organizational politics due to size, but in some cases it becomes the tyranny of the majority. While politics themselves are not necessarily negative, they are associated with power which may interfere with quality improvement. Politics are often seen in petty things and in the internal bickering that goes on between groups, the fragmentation into separate power groups and the personalities involved. Institutional politics are not necessarily undesirable. It involves the exercise of power, and people who have this power may not exercise it in a selfless way.

Administrative Areas

Administrators identify politics at work in budgeting and in the administration of collective agreements where politics is seen as a lack of reasonableness or collegiality and in a lack of trust which may impact on the mission. Politics is also seen in the notions one faculty may have about another, such as a belief that a professional degree is not as good or academic as others. The university has a great deal of power to make decisions, but people may be afraid to make them. The university seems to be very political, whether professors want it to be or not.

4.4.3 The Influence of Faculty Culture or Ethos

The summary quotations of respondents are shown in Table 4.4.3. The culture or ethos of professional faculties has a positive influence on quality as it was seen to awaken people to the fact that there are different ways of doing things. Important to quality is a culture that encourages student feedback. Some faculties have a culture where staff value research, while in other faculties research is not valued. In some faculties the culture is directed towards the practice of the profession, rather than towards theoretical work. While faculties may have several cultures, it is the dean's job to tilt the culture in a certain direction. Top ranking universities have a culture committed to high quality. It is often mythical rather than real, but provides a history, tradition, ethos and a sense of participating and belonging to faculty members.

Culture was seen to emerge in statements such as "if you don't rock the boat, do a minimum level of research, you have a smooth process" (professor, general faculty). We have "the sensitivity to other administrative cultures,... or any other academic cultures rather so there is a sense of straddling the range of academic cultures...of the ability to maintain, if not an empathy at least the pluralistic acceptance of those and the willingness to apply principles fairly to them, and not with the biases that you would be bringing to your own discipline" (general faculty, professor).

Professional Faculties

Some professional faculties have a culture of close working relationships with industry. In others it may be that a scholarly research culture is important. In

faculties with a research culture, there may be a star system where researchers with large research grants work in isolation. Faculties may have a service culture which is committed to their students and the development of practitioners in the particular field of practice. Professors act as symbolic role models who model professional behaviours as they develop practitioners in the particular field of study. It is during their study that students acquire certain beliefs about the profession.

Negative aspects of culture may come out where some faculty members believe that they have the right to undertake whatever they wish with respect to research as part of their academic freedom. Some faculty members may have a primary loyalty to their discipline, and are less concerned about issues such as quality of teaching, while other professional faculties indicate that their cultures have a lack of desire to do research or publish.

Table 4.4.3

Influence of Culture or Ethos

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<p>-The culture and several subcultures of the faculty awakens people to the fact that there are different ways to do things. -must allow creative people to have freedom. -a culture promoting accessibility. -some staff value research. -a culture committed to high quality. -a culture directed towards practice, rather than theoretical work. -the deans job is to tilt the culture, faculties have several cultures. -top ranking universities have a culture, rather mythical or real, it provides a history, tradition, ethos and a sense of participating and belonging. -a culture of close working relationships with industry. -a scholarly research culture is important.</p>	<p>-professors model their discipline and show enthusiasm. -the collegial will to work hard. -an enormous amount of what we do comes from tradition, it plays an important role. -many professors are members of professional organizations and must meet requirements for ethics and honour. -scientists are results oriented. -the dean projects the image of the faculty.</p>	<p>-there is a tradition and history that has a positive effect, with history comes conservatism and we are slow to change due to inertia. -universities are supposed to be at the leading edge of change and ideas but the culture of the university is conservative. -the research culture is highly innovative and has a positive impact on quality. -we try to be responsive to needs. -an attitude of continuous improvement is important.</p>

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.4.3

Influence of Culture or Ethos

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -the culture is a service culture committed to students and the development of practitioners in the field of study. -professors are symbolic role models who model professional behaviours and develop practitioners in the field of study, students acquire certain beliefs about the profession. -there is a culture of a star system, where researchers with lots of dollars working isolation. -the male model of success versus the female. -the faculty is a community. -the culture is one where we have to be the very best. -the collective decision making culture. -while university needs less public accountability than other organizations, there needs to be some, but it cannot be burdensome. -the culture is contingent on ideas which are products of time and place, social primers and economics. -some faculty believe they have the right to undertake whatever they wish with respect to research. -some faculty owe their primary loyalty to the national and international discipline and are less concerned about quality in teaching. 	<ul style="list-style-type: none"> -different disciplines have different criteria and understanding on what constitutes research quality. -science is more elitist. -scientists are not big on social science. -there is a publish or perish mentality. 	<ul style="list-style-type: none"> -a lack of support for females, a glass ceiling. -a conservative culture affects the ability to alter teaching methods in a way more consistent with our times. -research is driven by the availability of research funding which often directs the types and modes of research. This does not lead to earth shattering paradigm shifts. -because of collegiality, we cannot get agreement and movement to change.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Neutral cultural areas may include a collective decision-making culture, where decisions are made as a group. The culture of a faculty is often contingent on ideas, which are situational and products of a particular time and place as well as the social pressures and economics of the period.

General Faculties

General faculties identified culture as being positive to quality in those situations where professors model their discipline for students and show enthusiasm. An enormous amount of what happens in faculties was suggested as coming from history or tradition. In some cases professors are members of professional organizations and must meet certain requirements for ethics and honour. The dean must project the public image of the faculty.

Other impacts of cultures include instances where faculties have widely divergent criteria and understanding about what constitutes research quality. No assessment was made of whether this is good or bad. Cultural aspects such as a "publish or perish" mentality which may exist in the faculty were also commented upon.

Administrative Areas

Administrators see culture as coming from tradition or history. This history may, however, lead to a conservatism or inertia which makes it difficult to implement

change. Highly innovative research cultures may support quality. Important for quality also is an attitude of continuous improvement.

Other cultural factors in some faculties include a situation where there is a lack of support for women. The existence of a conservative culture often makes it difficult to alter teaching methods in a way more consistent with the times. Because of collegiality, it may not be possible to get unanimous agreement and movement to change.

4.5 Barriers to Quality

A large number of potential barriers to quality were put forward by university officials during interviews. For example, one senior administrator stated that "you get a feeling in the system that students are a nuisance, there are too many of them, they are over crowding us, they are overloading us, they are not prepared, they are not the kind of students we want.... it is like a doctor saying, hey everyone is sick, if only I had good healthy patients, I would have one hell of a practice." Another dean stated as a problem that "it's really unfortunate that quite often the attitude is one that is if you've been here longer, then you're better quality which is not necessarily the case". Another senior administrator stated "sometimes I think that universities have not responded well to the service dimension. On our campuses, they get caught up in research and in individual activity, and I don't think they have responded as well as a

private business or the private sector has to see how their clients are responding. But it is becoming more so as we are held more accountable by government." A professor in a general faculty suggests "what I think the university needs to do is more realistically recognize the strengths of individuals and allow them to more substantially pursue their strengths without insisting that they be the well rounded triad individual who researches diligently and produces quality results, and who provides an array of service to the community which is equally impressive. I think that is unrealistic."

4.5.1 Barriers to Quality in Teaching

The summary of the quotations of respondents is shown in Table 4.5.1.

Professional Faculties

Professional faculties outline a number of barriers to quality such as a lack of resources to provide incentives to teaching, not paying attention to results from student surveys, measures which are based on subjective judgements, a need for an action plan to be developed, a lack of resources to do proper evaluations, no accreditation body for some faculties or programs so no natural standards exist, faculties which have students who take part of their education off campus creating problems, some faculties having the added professional responsibility to ensure the competence of professionals to practice, external demands for professional training by groups which drives the faculty, the lack of proper systems for quality, long approval processes for curriculum

changes, inter-faculty obstacles to multidisciplinary activities and large class sizes which may impact on teaching quality. Also cited as barriers were the brief student-faculty contacts, the importance of a culture in the faculty, and the need to exemplify quality teaching, innovation and ideas.

Other barriers include large teaching commitments which often act as a barrier to research, an undervaluing of teaching, unclear definitions of teaching, research and service, the multiplicity of roles that many faculties must play, increased service teaching demands combined with reduced resources, and concerns that allowing instructors to be examiners in their own courses may cause a diminution in the standards for quality.

Table 4.5.1

Barriers to Quality in Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Lack of resources to provide incentives to teaching. -We do not have the capacity - not enough dollars to undertake proper evaluations. -No accreditation body and no national standards exist to compare us to other institutions - external reviewers must be used. -Some faculties have their students take all of their education "on site" while in others, medicine and education for example, much of the educational experiences takes place off campus. -Some faculties have the added professional responsibility to ensure the competence of professionals to practice. -Clinical component of some programs require unique teaching strategies. -Some faculties are geographically separate from others. 	<ul style="list-style-type: none"> -Small endowment funds compared to professional faculties. -Many students are from other faculties due to service teaching policy. A feeling that they are not real students - they do not attend because they want to study an area in depth. -Entry level - basic disciplines. Many programs are introductory to the university, or act as a transition or an interface between high school and university disciplines. -Scarcity of resources - more students - they get less attention from the instructor. -The larger the class, the more difficult to deliver a quality product. -Systemic problems - too many students. 	<ul style="list-style-type: none"> -Cross Structural boundaries - many boundaries and lineages between systems. -Long term under-funding. -The university is driven by demand. -We have to participate on almost all university committees of various types. -Very little influence on faculties or the unit level. -Out of the mainstream of the university, difficult to influence. -The reward system is not balanced, rewards are for publishing, and not for teaching, so until the system is changed, quality will suffer. -Teachers are afraid of public rating of their teaching.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.5.1

Barriers to Quality in Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -External demands for professional training can drive the faculty, especially when you are the only faculty in the province. -Developing programs which allow for the practice side to emerge in a university. -Curriculum quality is impeded by long approval lines - there is a need to be able to make curriculum changes more swiftly than in two years. -Inter-faculty obstacles exist to multi-disciplinary functions. -Class size is a barrier to quality of experience. -Large time commitments with respect to teaching inhibits the ability to participate in research. -Teaching quality is undervalued, valued less than research. While the fiscal rewards of one are clear, of the other they are not. -Curriculum is often developed independently without consideration of what one faculty can offer. 	<ul style="list-style-type: none"> -People who have abysmal teaching are promoted because they have some publishing. -Having policies that foster research to the detriment of teaching. -There are rigid guidelines for judging research, but nothing for judging teaching, even less for outside research and community contributions. -Existing criteria are nondescript and fairly soft. -No measurable criteria are articulated, the specifics are lacking. -While you must maintain adequate teaching, it is on research that you gain promotion. -Student surveys have to be used with caution, students intentionally fill them out with information which is not correct. 	<ul style="list-style-type: none"> -Quality is tough to measure, it is difficult to measure the outputs of teaching. -Make policy and regulations to encourage faculties to monitor quality.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.5.1

Barriers to Quality in Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -God only knows what criteria are used. -We are trying to measure something that is not measurable. -We do not address quality systematically. -Criteria are nondescript, soft, not articulated clearly and lacking in specifics. -Job descriptions of faculty differ greatly, some do mostly research, while others are clinical, some do teaching. -Measurement is highly skewed to input measures. -Some faculties make student assessment data public. Others do not. -Very brief student/faculty contacts. -The faculty culture is important. Those who want to work hard versus those who have family priorities and believe this is most important. -Need to exemplify quality teaching, innovation and ideas.-You have a distribution of performances along some measuring scheme. 	<ul style="list-style-type: none"> -Hate to have too much hanging on evaluation systems for ranking professors. -Need to serve many constituencies - multiple clients. -You get no rewards for teaching, so only a minimum of effort is put in. -Resistance to innovation that challenges beliefs. -People see it as counter-productive to work at teaching. -There may be almost as many views in the faculty of what quality is as there are faculty members. -Not everyone in society is convinced a general liberal education is valuable. -People want some assurance in their own minds that evaluation is fair and supplied equitably. 	<ul style="list-style-type: none"> -Need a true accountability measure to the clients of the university, the students. -We think of research opportunities and teaching load. -Expectations can be too high of students. -Commitment to accessibility, it is compatible with quality. -Need for programs in offbeat hours and offbeat locations. -You must be a teacher first and researcher second. -Need proper reward systems for good professors. -Need to ensure students are heard. -A barrier to good teaching is if no value is placed on it. -Teaching and research is not a primary focus, the focus is on program administration.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.5.1

Barriers to Quality in Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Programs should be delivered by areas with the best competence. -No real systems are in place to measure quality. -No real systems for performance appraisal for support staff. -What is meant by the processes of teaching, research and service is vague, it is an assessment on an idiosyncratic basis. -Some faculties have a multiplicity of rules, you cannot expect outstanding work everywhere. -Increased demands for service course delivery combined with reduced resources. -Instructors should not be examiners in their own courses. -We do not pay attention to measurable things, such as student surveys. -Measures are often subjective judgements of people sitting on committees. 	<ul style="list-style-type: none"> -Lab teaching is very much influenced by budgets, many labs have been reduced or eliminated. -Science is primarily an empirical hands-on thing. -Less traditional students have more problems - everyone has a right to go to university. -Some faculties denigrate teaching - it is not considered important for promotion - only research. -People see it as counter-productive to work at teaching. -There is a lot of correlation between the ability of the student and the kind of comments the instructor gets. -It is pretty easy to identify bad teachers, it is much more difficult to identify those who are not bad and merely adequate or who are really good. -How does one become an effective teacher, and exemplify quality teaching? 	

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Additional quality improvement barriers include a lack of criteria for quality, trying to measure things that are not measurable, not addressing quality systematically, a wide variation in job descriptions of faculty and measurement techniques which are often highly skewed to input measures.

General Faculties

General faculties expressed as barriers to quality their difficulties in establishing endowment funds compared to professional faculties which may be in more publicly favoured areas. There was a concern expressed that many students are forced to attend courses in these faculties because of service teaching policies. These students may not have a real interest in the subject matter they are studying. Many programs are entry level or act as a transition to other programs, and students are not planning to further study in this area. Also quoted as problems were a scarcity of resources, larger class sizes and too many students.

There was also cited a need by some faculties to serve multiple constituencies, a lack of rewards for teaching, a resistance to innovation that challenges beliefs, a multiplicity of views on what quality is, a perceived lack of fairness in evaluation systems and a general feeling that not everyone is convinced that a general liberal education is valuable to them.

Other barriers cited by general faculties are the severe impacts that budget reductions may have on laboratory teaching, non-traditional students who may have more problems than most students and need additional support services, the fact that some faculties may denigrate teaching compared to their research agenda, a difficulty in identifying adequate or mediocre teaching and an unclear process as to how you can become an effective teacher.

General faculties also indicated a problem with nondescript and fairly soft quality criteria, the fact that promotion is often based on research activities rather than on teaching abilities, and the misuse of student surveys which it is suggested must be used with caution as students may fill them out with information that is incorrect. There was a belief that it is important not to have too much emphasis placed on evaluation systems for ranking professors, as there was a lack of trust in their validity.

Administrative Areas

Administrators cite barriers to quality in teaching such as the structural boundaries between faculties and various units, the effects of long term under-funding of faculties, a lack of ability to influence faculties by administrative areas, the fact that the focus may be on program administration rather than on teaching and research, the need for proper reward systems for good professors to be put in place and the lack of value which may be placed on good teaching. Other barriers to quality include no accountability measures to the clients of the university and a general feeling that too

often our thinking leads us to think about research "opportunities" versus our teaching "load". The placing of too high expectations on students was expressed as a problem in some areas. Also needed were programs which could be offered in offbeat hours at a variety of locations. Other barriers include the reward system which is centred on publishing rather than on teaching, difficulties in measuring the quality of the outputs of teaching and the need to make policy and regulations which can encourage faculties to monitor their quality.

4.5.2 Barriers to Quality in Research

The responses are summarized in Table 4.5.2.

Professional Faculties

Barriers to research quality in professional faculties include a shrinking pool of dollars for research, a lack of consensus on the purpose of scholarship and research in some disciplinary areas, the need for a culture that supports research, as well as the need for administrative policies that support research, and the need for the necessary research infrastructure which includes the time, resources and facilities to support research.

Additional factors creating barriers to quality include the need for a collegial environment which is supportive of research, a movement to more teamwork and less individuality in research, a lack of will to act when there is poor performance, and the need for people to have an inclination or desire to undertake research. Barriers exist

where some professors may do little or no publishing and where the purpose or mission of the faculty is centred on teaching and scholarship with direct application to the profession. Another problem cited was a lack of clarity on what research productivity is, especially for tenured or full-professors.

General Faculties

General faculties expressed a number of barriers to research such as a publish or perish mentality, and situations where people who have abysmal teaching are promoted because they have done some publishing. Other related barriers include the high cost of research, and the fact that competition for research funding is on a national and international level. Also important are the tensions between applied versus theoretical research, and the fact that people may break a research topic into smaller pieces in order to publish more papers from it.

Table 4.5.2

Barriers to Quality in Research

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -The pool of dollars for research is decreasing. -There is a lack of consensus on the point and purpose of scholarship in some disciplinary areas. -Definitions of what constitutes research varies depending on the area of activity. -No research centres. -Need a research culture in the faculty that supports research. -Need an infrastructure to support research. -Shortage of time, resources, facilities. -Need a collegial environment, a community of scholars. -People need an inclination or desire to do research. -Some professors do little or no publishing. -In professional faculties the purpose is teaching, and scholarship with direct application. 	<ul style="list-style-type: none"> -Research is expensive, you cannot do research without money. -You are competing on a national and international level for research support. -There are tensions between applied and theoretical research. while most people want to do theoretical rather than applied research, governments want research to be more applied. Without basic theoretical research, you have nothing to apply. -People fix the way they publish to get more papers; break the paper up or publish in many places, they manipulate the system. -Different people in the faculty have different ways of going about their research function. -Some research is quantitative, other is qualitative. -Publish or perish, the only way to survive in this faculty - it should be different. -Not clear on the distinction between scholarship (both input and output) and research (only output). -To what extent can research be appraised as to whether is high quality or merely adequate. -With citations, it is cited by a world famous researcher, or cited as an example of poor research. 	<ul style="list-style-type: none"> -Finances - some faculties are better off. -Some situations are a work mill with students doing the work and the professor getting the credit. -Emphasis on a publish or perish attitude. -Research is not much use if you cannot pass it on to the students. -You cannot do research in an isolated setting. -The definition of quality research and what constitutes research varies from unit to unit.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.5.2
Barriers to Quality in Research

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Lack of consensus on what is legitimate and valid research. -A need for less individuality, more teamwork. -Only in really bad situations are informal discussions held about performance in research and teaching. -Difficult to achieve interventions if someone is not productive enough, it takes huge effort to take action about it. -Not clear what productivity is, especially for a tenured or full-professor, little means of assessing activities and deciding whether they are productive enough. -Administrative policies have to encourage research. 	<ul style="list-style-type: none"> -How do you compare a few world ranked publications versus less important journals. -How do you measure the contribution, when research and papers have multiple authors. -It is easy to identify bad research that must be rejected, more difficult to say what is mediocre or good, superlative research is easier to identify. It is difficult to have good methods of discrimination. -a university is not like a business, where if too many people do not further the interests of the business, the business will die. This does not happen in a university. -We must guard that research is not the only criteria used for promotion. -Some faculties have less opportunities for research grants, but does that relate to quality? 	<ul style="list-style-type: none"> -The amount of research done is not necessarily related to quality.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Barriers to research include not having policies which foster research, the fact that it is not clear how to measure research quality, so while it is easy to identify bad research, it may be more difficult to say what is mediocre or good and the need to guard against research being the only criteria used for promotion and tenure.

Administrative Areas

Administrators outline a number of research barriers to research quality such as a lack of finances and the problem with "work mills" where students are doing the work but the supervising professor gets the credit for the research. There seems to be a "publish or perish" attitude in some areas. A concern was expressed that research is not of much use if you cannot pass it on to students. Research cannot be conducted in isolation from the world. The amount of research undertaken does not necessarily have any relationship to the level of quality.

4.5.3 Barriers to Quality in Service

The responses are summarized in Table 4.5.3. Professional faculties outline as important the lack of formal systems for recognizing and rewarding it and encouraging service, as well as the nature and history of participation in service activities in the university. General faculties outline as a problem that time spent in service activities reduces the total time available for research. Problems in comparing criteria between faculties and the lack of acceptable measures tends to limit efforts in service. Service is considered of less importance than teaching and research. There exists a lack of

criteria available to measure the external service of faculty members. Administrators suggested that administrative service on committees helps to make the university work.

4.5.4 General Barriers to Quality

A number of general barriers to quality were expressed during the interviews. General barriers are not specifically related to any of teaching, research and service related activities but are broader in nature.

The responses are summarized in Table 4.5.4.

Professional Faculties

Professional faculties outlined a number of general quality barriers such as high workloads, too many people involved in committees, that the infrastructure of the university is crumbling, and the need for a mandatory retirement policy for those over age 70. There was a suggestion that some professors have been around for a long time and have inertia which makes it hard for them to change. There is also a belief that the union plays a more confrontational role than is productive some times. The different responsibilities for programs across faculties cause a problem as well. The lack of a consensus over mission and the long time frames involved in making some decisions were of concern, as well as the fact that universities are too centralized, removing some responsibility from the individual professor.

Other barriers elaborated on include academic freedom which may cause various agendas not to be in tune, low morale of faculty members, a need for open communication and politics of situations which can act as a barrier. Additional barriers include a lack of understanding about how to measure the quality of faculty output, and a lack of any time for action on quality due to heavy time commitments and competing time demands. In some cases barriers may arise from trying to do more than is possible with existing resources and quality suffers. There is a need for creative ways to circumvent obstacles such as budgets, and overcome the undervaluing of teaching and the pressures of administrative workloads. There was a question asked by one person interviewed as to how to make faculty members accountable for their non-assigned and non-sponsored time. Commented on was a tendency to leave what is meant by teaching, research and service ambiguous. Problems may arise by trying to tie performance measures to increment structures.

Table 4.5.3

Barriers to Quality in Service

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Important is the nature of history in the university. -No formal systems in place. 	<ul style="list-style-type: none"> -Time on service takes away from time doing research. -Service work does not get you anything. -Service considered of less importance than teaching and research. -Service often counts for little. -Lack of criteria to measure external services of faculty members. -Problems in comparing criteria between faculties. 	<ul style="list-style-type: none"> -People who are really good are donating time. -Administrative service on committees makes the university work. -The quality of service that is provided to the customers, in responding to the needs of the student.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.5.4

General Barriers to Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Workload is too high, so you do less community service. -Too many people are serving on committees. -The infrastructure is crumbling and rotting. -The under-resourcing of post-secondary education. -Budgets are often used for a lack of imagination. -Funding is a key issue. -The committee structure; committees do not do the best, there are more likely to accept the median level. -The time structure of bureaucracy. -Universities are too centralized, removing some responsibility from the individual professor. 	<ul style="list-style-type: none"> -The infrastructure of the university has been destroyed. -Administration becomes isolated. -Discipline boundaries - prevents interdisciplinary groups and activities - some of the more exciting new ventures are interdisciplinary. -The library is an academic disgrace. -Hard for people to maintain enthusiasm - aging faculty, classes larger and larger, students are not prepared. -Some faculties with similar functions are separate, should look at rationalizing related services. -Compartmentalization, boundaries across disciplines and within the university. 	<ul style="list-style-type: none"> -More students and fewer faculty - takes time from teaching and research. -Funding is important, therefore we need creativity. -Finances, aging physical plant and equipment. -Nibbling away at everyone through budget exercises. -Too much rigidity and bureaucracy and not enough understanding. -Bureaucratic interference takes time away from activities. -Decentralization gives faculties powers and their decisions are not always in the best interest of the university. -Have to define a quality focus.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.5.4

General Barriers to Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Is the current structure appropriate? -Programs may be departmental and faculty wide, the responsibility gets diffused. -Academic freedom used by some to mean total autonomy - do not have to be evaluated. -Ambiguous teaching, research and service without defining what is happening. -Are appropriate performance standards in place. -Need mandatory retirement. There is a need for mandatory retirement after age 70. -Tying performance to increment structures. -How to measure the quality of faculty output. -Any system of evaluation has to be voluntarily adopted by the faculty and developed and owned by the faculty - you need safeguards or a policy shell. 	<ul style="list-style-type: none"> -What is the right amount of resources, what teaching load is best? -Unions create barriers with respect to support staff. -Lack of rewards for administrators. -Not clear that evaluation systems are a measure of quality in the university. 	<ul style="list-style-type: none"> -Need accessibility - To be open to all kinds of people. -Problem with consistency of staff evaluation systems across the university and departments, not all persons get an evaluation.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.5.4

General Barriers to Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Academic freedom, agendas may not be in tune. -Morale is a real issue. -Politics can act as a barrier. -Resistance to innovation which challenges beliefs. -Evaluation must be seen as a valued and legitimate part of education. -The union plays a much more traditional role than is productive, there is an us and them approach as a result of unionization. -The university has not done a job in selling itself to the community. -Some professors have been around a long time, inertia. -There must be open communication. -People are not treated equitably. -Gap between outstanding superstars and those just doing the job. 	<ul style="list-style-type: none"> -Difficult to mobilize people who think of themselves as individual entrepreneurs, "prima donnas". -Morale and the impact of funding on it. -Lots of lip service to service being important, but it is not true. -Putting down your colleagues. -Instructors are examiners in their own courses. -No one wants to prioritize - so the present situation is less than adequate. -Problems in comparing criteria between faculties, some have more opportunities for research grants but does that relate to quality? -Once a professor gets tenure, they do not have to do anything. -People outside the university do not know how it operates - basic knowledge provides the foundation for other work. 	<ul style="list-style-type: none"> -Trying to change attitudes regarding students. -Politics are a problem, but they are not an excuse for not going ahead. -Attitudes which are anti-change and anti-consideration for doing anything different. -The collective will and collective understanding of the problem. -People lower on the "food chain" do not want to take responsibility. -Human nature - you need a plan for quality. -People close to the situation do not take action - do not make the decision that should be made. -People have to take the need for quality into their culture. -Must think constantly about the customer. -Communication not always as good as you may like.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.5.4

General Barriers to Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Have to concentrate activities to improve quality. -What is rewarded, is it teaching or research, it is not clear but it seems to be research. -People want equity across the faculty. -Lack of time - heavy commitments and competing demands. -Trying to do more than we should, quality suffers. -The multitude of interest groups that we try to serve. -We need to think about creative ways of circumventing obstacles. -Workload is a barrier, trying to do too much work with too little resources. -A lack of consensus on mission. -Time frames - some people are in a certain career phase and do not care to change. -Teaching quality is undervalued, valued less than research, the fiscal rewards of one are clear, of the other they are not. -Administrative workloads. -How to make faculty members accountable for their non-assigned/non-sponsored time. 	<ul style="list-style-type: none"> -Over-regulation of the activities of academics just gets their backs up. -There is a tendency to try to do too much, to try to keep doing things despite cuts. -No time to think, or to do things. -Barriers due to isolated location. -Paperwork. 	<ul style="list-style-type: none"> -The bureaucratic mindset is a problem. -The sheer amount of work to do and time to do it in. -People are busy on day-to-day things and do not have the luxury of sitting down and planning - planning takes time. -You may need outside help to plan. -It takes longer for new teachers to prepare for lectures, they need a break in teaching load. -Having everyone on-side to take action to improve quality.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

General Faculties

General faculties specify as barriers an ongoing problem whereby the infrastructure of the university is being destroyed by continual cutbacks, an administration which is isolated from its faculty members, real or perceived boundaries between disciplines or a compartmentalization of activities which acts as a barrier to interdisciplinary work, a lack of the setting of priorities which affects workloads, and a difficulty for faculty members to maintain their enthusiasm. Some other barriers mentioned was the "prima donna" or entrepreneur attitude of some faculty members and the negative impact of funding decisions on morale. Also stated as a problem was a situation where there is a "putting down" of some faculty members by their colleagues.

Also commented on as barriers was the policy of allowing professors to be examiners in their own courses. Another problem is that once a professor gets tenure, they are no longer pressured to do anything. There is a lack of knowledge shown by people outside the university about how it operates, attempts to over-regulate the activities of academics, a general tendency by some to try to do too much, and barriers which are caused by too much paperwork. There was a need to identify what amount of resources is correct and establish the ideal teaching load. Barriers are created by support staff unions. There is a lack of appropriate rewards for administrators which creates problems and a belief that evaluation systems do not necessarily measure quality in the university.

Administrative Areas

Suggested barriers include the general lack of time to sit down and plan for quality, and a need for creativity to allow us to develop ideas to offset a lack of funds. Other areas mentioned include the bureaucratic mindset, an aging physical plant and equipment, bureaucratic interference that takes time away from critical activities, the need to have everyone on-side to improve quality and a decentralization of responsibilities which gives faculties powers to make decisions which may not always be in the best interests of the university. Also noted are the negative attitudes of instructors regarding students, the politics of the situation, anti-change attitudes which are against doing anything, the lack of a collective understanding of the problem, people not wanting to take any responsibility for quality, the need to bring quality into your faculty culture and begin to think constantly about the student as a customer, and the need for improved communications.

Other barriers include the sheer amount of work that must be done and the available time to do it in. There is also a need to define a quality focus, the need for accessibility, and a problem with the consistency of the application of staff evaluation systems, as it is not the case that everyone now gets an evaluation.

4.6 Administrative Factors Which May Influence Quality

A department head suggested that "...if we could keep the bureaucracy to the minimum, I think we could spend more time on what we are doing...we have to have

some administrative work going on obviously, ...when you start to overwhelm people with what one might call "administrivia", then it just saps your energy and takes away from the main job we are supposed to be doing". A professor from a general faculty suggested " I don't see the university administration having any negative impact. I'm not sure that I see it as having much positive impact either. It's sort of out there and necessary.....". Interviews indicated that administrative processes were generally viewed negatively by professional faculties, general faculties and also by the administrative areas themselves. A dean commented on the administrative role that "I see my role as trying to help every faculty member develop their expertise and ability to the greatest extent possible...the real trick is to make them work together as a synchronized unit. It's a little like a symphony orchestra. You have a whole bunch of virtuosos who are good at playing particular instruments, but how do you make it sound harmonious...that is the real skill". A number of administrative related factors were commented on in the interviews. These might influence quality and include the general administrative processes of the university, budget processes and the administration of collective agreements.

4.6.1 Impacts of University Administration Processes

The responses are summarized in Table 4.6.1.

Professional Faculties

Professional faculties indicated as impacts of administration processes the delegation of authority to faculties, the use of committees to democratize the decision process (although that was seen to take time away from other things), centrally disseminated information on research grants and the safeguards that various administrative processes provide from making changes on the spur of the moment. Other administrative factors were a movement in the institution to tie salary increments to a performance appraisal system, the increasing bureaucratization of the institution, full professors may have less commitment to their faculty and turn to what they feel are more meaningful things to prevent themselves from being sucked into the institution, an atmosphere which is stifling and anti-creative rather than one which is open and supportive allowing the creativity of professors to be turned loose. Another area mentioned pertains to the long delays for curriculum and program changes.

Table 4.6.1

Impacts of University Administrative Processes for Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Leaving autonomy to the faculties is good. -Increasing democratization through the use of committees to make decisions. -Central administration disseminates information on research. -Need processes, if you could change things on a whim, it could be worse in the long run. -Tying the increment structure to the assessment of performance causes problems. -The institution is becoming bureaucratized. -The institution sucks time and energy from everyone, it is a greedy institution. -Less commitment from full professors, they turn to more meaningful things rather than being sucked into the institution. -Can be anti-creative, stifling, need an environment that turns professors loose. -Administrative processes get in the way, are not helpful or supportive. -Need streamlined mechanisms for research. -Too slow to change curriculum, but allows for sober second thought. 	<ul style="list-style-type: none"> -Evaluations are time consuming. -Keep these processes to a minimum. -Compress the amount of paperwork. -Spending too much time on things which are not really priorities. -Many meetings. -Tremendous amount of paperwork -Job of faculty members is unstructured, works crazy hours. -More and more exemptions from exams. 	<ul style="list-style-type: none"> -Administrative processes are of a collegial nature, everyone is meant to be involved. -People fail to take the action they should, slow and cumbersome. -More rules decrease efficiency. -Intrusive, take away time from teaching and research, it affects quality. -Rules create barriers for access. -Too much paperwork. -Not customer oriented, very little about the university is.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

General Faculties

General faculties cited problems with administrative processes such as the time taken to do staff evaluations, classes being too large, the need to compress administrative paperwork right down to the minimum, a belief that too much time is spent on things other than teaching and research that are not really priorities such as administrative paperwork and meetings and an increasing movement to provide special exemptions from examinations.

Administrative Areas

Administrators noted the collegial nature of many administrative processes which is important for quality. Also impacting on quality are administrative processes which are cumbersome and decrease efficiency, taking away time which could be spent on teaching and research. All of these things potentially impact on quality in the university.

4.6.2 The Impact of University Budgets on Quality

The responses are summarized in Table 4.6.2.

Professional Faculties

The budgeting process was identified as having an impact on quality. Professional faculties identified the need to examine priorities through the budgeting process. Also

believed as important was the ability of the university to encourage things and create an infrastructure to support research. The present decentralized budget system where responsibility is delegated to faculties and their deans was seen to be important. Faculties are academically responsible for themselves academically and have easy access to the vice-presidents. There are short lines of communication and approval which was seen as beneficial for quality. Existing processes were generally seen to be as good as they can be, as there exists flexibility to allow faculties to go out and raise funds externally if they wish.

Professional faculties criticize the budgeting process which is not seen as enhancing quality, but more as an exercise in how many dollars you are going to lose every year. Someone must make the hard decisions, it was commented, to concentrate resources into those areas of the institution that have the greatest future to ensure quality. The present financial picture was seen as providing continual movement to reduced service, reduced output and mediocrity. An added factor is that people are afraid of losing their jobs, and do not have a lot of confidence in what is happening. There is an aura of mystery surrounding the budget evaluation process and some suspicion over the criteria being used to make decisions.

General Faculties

General faculties believed that the impact from the budgeting process made it hard to attract full-time faculty members and keep good faculty members. There was concern

that some people have friends in the administration, and that knowing the right people seems to be important. The general infrastructure of the university is deteriorating, with archaic equipment not being replaced in a timely manner and the supplies budget being affected most and impacting on quality. There was concern that the increased class sizes were affecting the ability of professors to communicate properly with students. There was a belief that it was unrealistic to cut back everyone, but rather resources should be shifted to those doing "the real work of the university."

Table 4.6.2

The Impact of University Budgets on Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Good system for examining priorities. -University can indirectly encourage things through the budget. -Infrastructure support for research can create a supportive environment. -Decentralized budgeting, deans get the dollars and take action. -Allowed to keep carry over, which is a positive feature supportive of quality. -You are responsible for yourself academically. -Fairly easy access to vice-presidents. -Short lines of communication and approval. -Flexibility to raise dollars externally. -The budget process does not enhance quality, it is an exercise of how much will you lose. -Need hard decisions to concentrate resources into areas with the greatest future. -Continued movement towards reduced service, output and mediocrity. -Creates uncertainty, people are afraid of losing their job. -Not clear on what basis judgements and evaluations are made by central administration. -Units want to know what quality performance and the criteria are. 	<ul style="list-style-type: none"> -Reasonably open and well understood. -Hard to attract full-time faculty and keep good faculty members. -Not enough dollars. -Knowing the right people in administration is important. -Very hard to hire tenured professors. -Archaic equipment not replaced in a timely manner. -Supplies budget affected most. -Too late in the year when we find out about next year's budget. -Unrealistic, we should shift resources to those units doing the real work of the university. 	<ul style="list-style-type: none"> -Unit heads responsible for their budget. -Everything is decentralized, making decision-making difficult. -Is historically driven and cannot respond quickly. -Problems with respect to setting and ranking priorities. -Present climate does not create an atmosphere for creativity. -Process aimed at traditional faculties. -Budgets impact accessibility. -A mystery how budget decisions are made. -Not always clear that throwing dollars at the problem is the answer. -We need to make amputations and vertical cuts.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Administrative Areas

Administrators see the present budget system as supportive to quality as it requires unit heads to be responsible for their own budget. Concerns were expressed about cutbacks creating larger classes and the need for multiple choice exams. It was thought that decentralization of decision-making affected quality. There is a need expressed to set priorities, although this is seen as difficult. There was a belief that there was some mystery in the present budgeting system with a need for better communication and information being made available on how the budget process works. Suggested was the need to make amputations or vertical cuts, as resources decline to improve the situation for those programs remaining. The present economic climate was not seen as conducive to creativity.

4.6.3 Impact of Collective Agreements on Quality

The responses are summarized in Table 4.6.3.

Professional Faculties

Impacts cited by professional faculties included the fact that collective agreements make the process more honest by insisting on scrupulous and accurate measures and provide some direction for quality and act as a generic form of accountability as well as providing safeguards of fairness and justice in treatment for all. The resistance of the faculty association to the notion of evaluation and the situation where negotiations

with the union are hostile were seen as being detrimental to quality. There was some belief that unions abuse the concept of academic freedom, and make it difficult for administrators to challenge performance if someone is not performing according to the collective agreement or intimidate administrators from resolving personnel problems. Collective agreements also add a rigidity to the system which may be detrimental to quality. Collective agreements were believed to lull some people, who are not producing the way they should, into complacency.

General Faculties

General faculties cited as an encourager of quality things like leaves of absence. Also cited as important was academic freedom and the ability to pursue whatever you wish in your research within certain bounds and that people are allowed to go about pursuing excellence in different ways. People's rights are protected by collective agreements which take away some of the arbitrariness which may occur if they did not exist. Also impacting quality were factors cited which include the development of a "them and us" phenomenon, which may result in confrontation. There was a concern that the union was not always conciliatory, even though this is what the university is about.

Table 4.6.3

Impacts of Collective Agreements

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Collective agreements make the process honest and insist on scrupulous and accurate measures. -Provide generic accountability and direction. -Provide safeguards. -Afford protection, fairness and justice. -Often resist the notion of evaluation. -Creates fear and anxiety. -People do not want to take risks. -Difficult for an administrator to challenge if faculty are not performing, do not want to resolve personnel problems. -Unions abuse the concept of academic freedom. -Unions protect individuals, whether justified or not. -Do not allow you to pay for a quality performance. -People are lulled into complacency. -Problems with movement of staff in administrative areas. 	<ul style="list-style-type: none"> -Act as an encourager to quality. -Academic freedom assists. -Quality, you may freely pursue what research you wish within certain bounds. -Unions protect rights. -Take away arbitrariness. -There is a them and us phenomena. -Creates confrontation, the union is not conciliatory, this is not what a university is about. 	<ul style="list-style-type: none"> -Designed to ensure fair, safe and just working conditions where people are free to do things. -Ensures fairness and protection of employees. -Creates a homogenization, but this does not ensure quality. -Detrimental sometimes as people may feel they have security and do not care. -Confrontational, no trust from either side. -Stifles initiative. -Difficult to be flexible.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Administrative Areas

Administrators identify some quality influences of collective agreements such as the fact that they include fair, just and safe working conditions and protect employees. Other quality effects include the fact that they create a homogenization, although this does not ensure nor reward quality. People may also be lulled into a feeling of security. Other negative factors arise from the confrontational aspect of negotiations in collective agreements where there may be a lack of trust and demands made which can out-strip financial resources. They may also, through their rules, take away from the ability to serve people better and can create a devaluation of teaching.

4.7 Measures of Quality in the University

A large number of measures have been developed by universities in support of quality in teaching, research and service. A department head from a general faculty commented that "the one thing that is easiest to identify is worthlessness. There is plenty of it. What is much harder is when you are above that line." A professional faculty professor was asked to comment on teaching, research and service and stated "what do they mean in the university by these concepts? It is extremely vague, because it is an assessment on an idiosyncratic basis, a set of colleagues will sit down on occasion to evaluate others. God only knows what criteria are used."

The responses are summarized in Table 4.7.1.

4.7.1 Measures of Quality in Teaching

Professional Faculties

Professional faculties have a number of what may be termed outcomes related measures such as their annual instructor course evaluations, graduate follow-ups and employer follow-ups. Other types of measures used include meeting with student representatives or talking to students about their educational experiences and peer evaluations comparing programs with those of competitors, counting the number of awards granted to graduates, the performance of students on national exams and having graduates who stay in the province and do not migrate to other provinces or countries.

General Faculties

General faculties commented on measures of quality including the assessment of student outcomes through surveys, professor course evaluations undertaken by students or their general success upon entering the job market. Other measures include personal interactions, feedback obtained from students, graduates and alumni, peer evaluation of teaching, and students who may come and complain like crazy to the department head. Other measures used to further quality include a system of common exams which are suggested as a useful measure of quality, awards for teachers, and information that includes how well students do when they go to other institutions. Other methods to further quality include periodic curriculum reviews, teaching

assessments which provide ongoing evidence of quality in course design and the direction of graduate students in their programs.

Administration Areas

Administrators suggest measures such as student evaluations or program exit questionnaires and follow-up studies as useful or the use of peer review of course outlines and reading materials, cooperative education which allows the opportunity for interaction with others outside the university and seeing staff and students as a priority. Additional measures of quality include the use of standardized tests and conducting of program reviews every 3-5 years to ensure that basic standards are maintained.

Table 4.7.1

Measures of Quality in Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Annual course/instructor evaluations. -Success of graduates in industry. -Graduate follow-ups conducted on a five-year basis. -Employer follow-ups. -Meet with student representatives twice a year to get direct input, students often conduct their own survey and consult with peers before this. -Talk to students about their educational experiences. -Peer evaluation. -Compare programs with major competitors. -Numbers of awards/recognition of graduates. -We can assess how much teaching someone does, we can assess the people who do it well, the top 5%. -Assessments of the quality of student life. -Graduates stay in the province, do not migrate. -Having students in a masters program. -Teacher of the year awards. -Performance of students on national exams. -Perceptions of students. 	<ul style="list-style-type: none"> -Student surveys, used for feedback for promotion and tenure. -Success of students entering the job market. -Professor course evaluations. -Students come and complain like crazy to department head. -Feedback from students, graduates, alumni. -Peer evaluation of teaching. -A system of common exams would be useful. -Successful completion of degree by the students. -How well students do when they go to other institutions. -Nomination for awards, but there are good people in the system who never get to be named best teacher. -Periodic curriculum review. -Teaching dossiers with evidence of course design. -Direction of graduate students. 	<ul style="list-style-type: none"> -Student evaluation if you use the right tool. -Follow-up studies. -Exit questionnaires. -Have to determine who are the people that use the services of the university, staff and students being number one. -The product is being delivered to students, and they are the ones to best tell about quality. -The graduate supervisor/student relation. - expectations are clear and well articulated. -Cooperative education allows you to see the skills of the person to test them during their academic term. -Standardized tests. -Program reviews every three to five years. -Peer review of course outlines, reading materials.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

4.7.2 Measures of Quality in Research

Responses are summarized in Table 4.7.2.

Professional Faculties

Professional faculties may from time to time participate in cross-Canada studies of research activities. Measures of research quality often use a peer review process of whether the research activity builds upon current theory, or looking at the linkage or impact in applied areas, using citation indexes to measure the value or use of publications by other authors, counting the frequency of requests for reprints of papers, awards conferred on staff of a provincial, national and international nature, number of invitations to be a keynote speaker at conferences, the number of publications produced or research grant dollars received and by looking at the effect or impact of the research. Other measures can include looking at the types of specialized research undertaken for industry.

General Faculties

General faculties use some external peer evaluation but mostly rely on quality indicators such as citation indices, totals of grant monies awarded, honours and awards received, an assessment of the usefulness of research for policy making purposes, annual reports produced on research and service activities, and publishing in refereed journals. Less objective measures include the general progress of faculty members in

their overall research program, and the utilization of a peer review process for research grants and publications to ensure quality. There seems to be a consensus that research is easier to measure than teaching, given the types of processes involved in generating the research and that publications produced through the research process are normally peer reviewed.

Administrative Areas

Administrators use measures of quality such as peer review systems to assess research and suggest allowing the clients of contract research themselves to determine quality. Other indicators of quality included whether or not faculty members receive full merit increments, the ability of faculty members to obtain research grants, publishing in peer reviewed journals, the degree to which research products are deemed useful by their ultimate users and invitations received to present research material. Another important measure of quality includes the fact that if you do not do enough research, you will not be promoted.

Table 4.7.2

Measures of Quality in Research

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -specific evaluation - studies conducted across the country of research activities.-Building on current theory measured by peer review. -Citation index. -Specialized research for industry - value easily measured as you can see/improve results, commercialization. -Peer reviewed work. -Linkage/impact in applied areas/professors. -Impact on practice. -Impact on body of theory, an ability to affect either the literature or practice. -Number/frequency of requests for reprints. -Number of applications from graduate students in other provinces/countries. -Awards conferred on staff (provincial, national, international) 	<ul style="list-style-type: none"> -Rely most on external evaluation. -Peer evaluations. -Citation index (If positive quotation). -Is it still important in 200 years? -Articles published in refereed journal. -Weigh publications on performance scales. -Easy to identify those who are stars, wizards, get Nobel prizes, teaching awards, create new departments, bring about great reforms. -Faculty members report annually on their activities and community service. -Objective evidence about publications. -Grant monies achieved. -Honours and awards achieved. -Usefulness of research for policy. 	<ul style="list-style-type: none"> -Peer review system. -Contract research is easy, the client will determine the quality of the product. -Many faculty members do not receive full increments, due to a lack of productivity in research. -Ability to attract research grants/external funding, criteria are track record, importance of the research. -Is the individual being published? This is a measure as to whether the research is worthwhile. -Publishing in peer reviewed journals, judged by people with some experience. -Invited presentations at national/international conferences. -Attractiveness as a consultant. -Research judged on its scientific or scholarly merit and impact on the field of study.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.7.2

Measures of Quality in Research

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Requests to serve on senior committees. -Licensing of products by private industry. -Conferences/presentations made. -Invitations to be a keynote speaker. -Written reports on research grants applied for, publishing in quality journals. -Developing research proposals indicates a commitment to research. -Easy to measure, publications and external dollars. -In clinical activities, how much time is spent on them. -Your general reputation. -The effect of research undertaken. -Reports done for the province. -Peer evaluation. -People who have selected this university to work. -Depth/breadth of the research. 	<ul style="list-style-type: none"> -Counting has a high priority. -Publication record. -Progress in the overall research program is evaluated, but this does not necessarily relate to quality. -Research not evaluated, people are evaluated every time they apply for grants and submit a paper through an external refereeing process. 	<ul style="list-style-type: none"> -The degree to which the products of the research are useful. -Productivity. -Invitations to present material. -If you do not do enough research, you will not be promoted. -Scholarship-creative work includes the writing of books(fiction or non-fiction). -Scholarly activity of the university, helps increase and maintain the quality of the university. -Good research is done according to good ethical standards.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

4.7.3 Measures of Quality in Service

Responses are summarized in Table 4.7.3.

Professional Faculties

There are a number of measures of quality in service activities which are used by professional faculties. These include personal interactions to obtain feedback from the community, annual reviews of faculty members' activities including giving talks or short courses in the community. A useful measure of quality is to see if those receiving the service come back for a repeat performance, looking at the extent to which the faculty is engaged in technology transfer and diffusion, numbers of committees participated on and election to university bodies by peers. These criteria and measures are well articulated by promotion and tenure criteria.

General Faculties

General faculties use measures such as finding out what your peers and the community think about your work, being first invited to do something and then being invited back again, the payback and feedback received about usefulness of activities, does the service facilitate the activity of a particular group or not, being asked to chair prestigious committees and recognition by newspapers and elsewhere for service to the community. There were comments that you just have to do service, but it cannot be measured.

Table 4.7.3
Measures of Quality in Service

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Coming back for a repeat experience is a measure of quality. -Persons involved are clearly involved, those who are not are not. -Feedback from the provincial government, community. -Enhancement of the well being/prestige of the university. -Extent to which the faculty is engaged in technology transfer and diffusion. -Outreach awards to the staff. -Adequately serving the public's needs, measured through feedback. -Working independently with external groups, companies. -Doing talks, giving short courses. -Sitting on provincial and national bodies. -Annual reviews of the dean, where accomplishments are listed. -Industry recognition. -Number of committees participated on. -Election to university bodies by peers. -Well articulated by promotion/tenure criteria. 	<ul style="list-style-type: none"> -Being invited to do something, and then invited back. -What peers/the community thinks of your work. -Relates to skills and communication. -The payback and feedback from activity. -Promotes programs and develops networks to further assist with identifying additional resources or opportunities in the community. -Being asked to chair prestigious committees. -Recognition in the newspaper/elsewhere for service to the committee. -Local, national and international activity in the person's area of expertise. -Does the service activity have an impact, does the service improve the university, does the service facilitate the activity of a particular group? -Everyone has an obligation to do service and contribute to the governance of the university. -Just do it, it cannot be measured. 	<ul style="list-style-type: none"> -Success helping local business. -Update CV annually to report on this, includes service to national and professional societies. -Letters received from external groups thanking for participation. -Being on committees. -Outreach awards. -Level of prestige of committees participated on. -Look at who is doing what, who is better at things, this often related to personality. -Willingness to participate in internal and external committees. -Persons taking a major role in university service. -Service to community of a professional nature, work on volunteer boards. -service which may be national or regional

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Administrative Areas

Administrators use measures pertaining to the success of faculties helping local businesses, whether the service provided is national or regional, letters received from external groups in response to service, outreach awards received and the prestige of committees participated on. Other measures cited include the willingness to participate in internal and external committees and by looking at who is doing what in the faculty and who is better at things, for example, one person may be good at committees, another better at working with industry and so on which provide valid measures of quality.

4.8 Activities to Improve Quality

This section will review the results collected from interviews which pertain to various activities used to improve quality. One dean of a general faculty stated that "what makes for quality for me is openness and fairness and being willing to establish clear policies that everyone knows what the expectations are. I think that's important." Another quote from a senior administrator comments that "when people come in and want to see curriculum changes,.... if you start now we are talking about 1995 or 1996....you lose some of your enthusiasm for introducing change...it is going to be such a long time before you see the fruits of your labours.... it makes us less responsive... to offer quality, we need to be responsive."

4.8.1 Activities to Improve Teaching Quality

The responses indicated a very high level of activity to improve quality and a high level of concern over quality, with many activities underway to improve quality.

The responses are summarized in Table 4.8.1.

Professional Faculties

Professional faculties outlined a number of quality activities including bringing in sessional lecturers, using distance education, setting up committees and setting up a departmental library on effective lecture techniques. Other activities to improve quality include receiving encouragement from central administration, fostering teamwork, holding monthly faculty council meetings in the evening when all can attend, developing collaborative relationships with the community, peer to peer time being made available for discussion and debate, mentoring by senior faculty members of junior faculty members, being closely related to industry, and by having the dean articulate a clear quality message.

Table 4.8.1

Activities to Improve Quality of Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Admissions committee, promotion and tenure committee, budget preparation exercise. -Set up sub-units to create rivalry and competition. -Program accreditation, which requires certain content for programs. -Departmental library on effective lecture techniques. -Some faculties are high profile and can generate large amounts of research funding. -Support those seen to be leaders. -Dean must articulate a clear message. -Encouragement from central administration. -Holding monthly faculty council meetings in the evening at a convenient time when everyone can attend. -Written communication to keep people informed. -Collaborative relationship with the community-research tied to the community and relevant. -Peer to peer time for discussion and debate. -Closely related to industry - have a constituency. 	<ul style="list-style-type: none"> -Curriculum committee of faculty council. -Special student fees or levies to enhance the equipment. -Endowment funds to support research, teaching and libraries. -Excellence in teaching committee. -Make structural changes, look at how to improve without punishing a person. -Awards for outstanding teaching. -Student/faculty member advisors, each student is paired with a faculty member. -Considering students as customers. -Meet senior students to ask their views/perspective on what may be done. 	<ul style="list-style-type: none"> -Academic review process. -Evaluations of faculty member performance as part of the tenure and promotion proceedings. -Academic review process and day-to-day monitoring. -Appeals process for students. -undertake research to identify student interests, attitudes, expectations and obtain a response to how they are being served. -Teacher education programs, professional development. -Promote speakers on campus.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.8.1

Activities to Improve Quality of Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Specific criteria for promotion and tenure that spells out different levels of accomplishment. -Each course has its own evaluation system with varying levels of complexity. -Peer review process for promotion and tenure. -Maintain a large operating and supplies budget. -Accreditation review - requires certain content for programs. -High admission requirements. -Collective agreement regulating the affairs of faculty and sets structures to allow things such as merit pay and tenure. -Cross reading of papers, to review anomalies of marks. 	<ul style="list-style-type: none"> -Good communication. -External accreditation. -Monitoring things like student attrition rates. -Open ended questions from evaluations are useful to collect data. 	<ul style="list-style-type: none"> -need to openly publish teacher evaluations, make teachers more accessible. -A strong emphasis on customer orientation. -Feedback given to instructor on performance. -Good equipment, good environment.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.8.1

Activities to Improve Quality of Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -dean meets with professors once a year to review teaching/student evaluations and make plans for the next year. -Mentoring by senior faculty members. -In smaller faculties/schools, director meets with faculty on a regular basis. -Hold lunch before faculty council meetings, get together in an informal setting before senate. -Working to assist teamwork and cohesion by facilitating people's work, reviewing research proposals. -Dean must hold unit heads responsible to ensure that the objectives and missions of the sub-units are being realized. -Ability for political influence. -Spread too thin, so reducing some research and teaching programs to concentrate resources in fewer areas. -Use of distance education techniques to improve delivery of programs. -Extending the faculty to the external community. -Bring in sessional lectures in specialized areas. -Staff are responsible for assessing student progress. 	<ul style="list-style-type: none"> -Policies on teaching responsibilities, create openness across the faculty, everyone knows what the criteria are and it creates a framework for quality teaching and research. -Initiate external reviews. -Set up faculty evaluation system. -Faculty strategic plan, and monitor quality against the plan. -Develop standardized measures. -Liaison with the high school system. -A mentor system where an individual can go individually to get help. -Keep active files on publicity/articles on the faculty. 	

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.8.1

Activities to Improve Quality of Teaching

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Assessment of teaching and research activities as to whether an individual is living up to expectations. -Review process, modify the instrument used for student feedback. -Encourage staff to participate in upgrading programs. -Teaching effectiveness workshops. -Subscriptions to journals to improve teaching. -Annual activity submission to monitor faculty activities. -Seminars on evaluation. -Doing rankings in conjunction with student evaluations. -Annual or semi-annual course evaluations. -Invite staff and encourage them to seek help and improve their teaching. -Bring in external reviewers to review the total aspect of faculty and determine weaknesses and strengths. -Give professors who do not want to do teaching more free time for research. 	<ul style="list-style-type: none"> -Try to keep track of students who go into graduate school and elsewhere. -Bring in outstanding external people as speakers. -Sponsor lectures, seminars and workshops. -Workshops in faculty evaluation. -A coherent focus. -Improve the ratio of faculty to students, adding teaching assistants. -All upper level courses should have a writing component, as well as critical thing and mathematical components. 	

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Additional quality activities mentioned include defining specific criteria for promotion and tenure, maintaining a large supplies and operating budget to support teaching activities, developing admission requirements to ensure high entrance standards, conducting regular accreditation reviews, and using the collective agreement to set in place some structures for quality.

There are a number of activities for quality in professional faculties including holding teaching effectiveness workshops, encouraging staff to participate in upgrading programs, holding seminars on student evaluation, bringing in external reviewers and giving professors who do not want to do teaching more time for research.

General Faculties

General faculties have a number of quality improvement activities such as curriculum committees, workshops to improve faculty evaluation, establishing special student fees to enhance laboratory equipment, creating endowment funds, sponsoring lectures, seminars and workshops, mentoring systems, awards for outstanding teaching and keeping active files on publicity or articles pertaining to the faculty. Other activities cited to improve quality are through liaison with the high school system, ensuring good communication, meeting with senior students and treating students as customers.

Also cited were activities to improve quality through external accreditation processes, monitoring of student attrition rates, developing policies and communicating them to

staff so that everyone knows what the criteria are, creating a framework for quality teaching and research, conducting external program reviews, faculty strategic planning and developing standardized measures of quality. Other activities include improving the ratio of faculty members to students, adding teaching assistants to support the teaching process, and ensuring that all upper level courses have a writing component as part of them.

Administration Areas

Administrators outlined a number of activities to improve teaching such as teacher education programs, promoting speakers on campus, providing a strong emphasis on customer orientation and taking action to make teachers more accountable by openly publishing the results of teacher evaluations. Other areas cited include the academic review process, day-to-day monitoring, having appeals processes in place for students and evaluating faculty member performance as part of tenure and promotion proceedings. Additional suggestions relate to providing proper equipment and a good learning environment and undertaking research directed at identifying student interests, attitudes and expectations.

4.8.2 Activities to Improve Quality in Research

Responses are summarized in Table 4.8.2.

Professional Faculties

Professional faculties have identified a number of activities to improve research quality such as the development of research infrastructure and the establishment of research institutes to support research activities, providing dedicated time for research work, working to have research efforts form some kind of concerted effort so that all research studies build on each other, mentoring of junior faculty members, and setting up a format to critique research proposals to enhance and strengthen them.

Additional activities mentioned include having clear expectations that all full-time faculty members participate to some extent in research. Also commented on were activities to improve research quality including cooperative activities such as developing joint research applications, bringing in external reviewers to assess faculty quality and identify priority areas for improvement, finding travel monies to send faculty members to prestigious conferences and finding funds to support staff research activities where necessary.

General Faculties

General faculties identified a number of activities such as staff workshops to help new faculty prepare successful research grant proposals, providing support for post-doctoral fellows and graduate students, establishing research institutes to help generate funds, creating faculty research committees to assess activities, providing travel funds to

assist the travel of graduate students as well as faculty members to conferences, and only providing release time for research when absolutely necessary to a project.

Other activities referred to include putting pressure on people to participate in research and obtain research grants, and recognizing the success of colleagues in their endeavours, rather than putting them down. Additional related areas to improve research quality include the existing academic review process and day-to-day monitoring of research activities.

Administrative Areas

Administrators suggested a number of areas such as establishing research committees and special interest research groups to facilitate research activities as well as the usefulness of research bulletins to keep people informed about activities. Other related activities include having other faculty members read people's work and by reviewing research grant proposals prior to submission.

Table 4.8.2

Activities to Improve Quality in Research

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Development of infrastructure to support research. -Research institutes to support research. -Establish a research committee. -Setting up a forum to critique research proposals to enhance/strengthen them. -Clear expectations that full-time faculty participate in research. -Cooperative activities; joint research applications, cooperative projects. -Having research efforts form some kind of concerted effort, so that one study builds upon another, rather than isolated studies. -Mentoring of junior faculty members. -Provide dedicated time for research. -Bring in external reviewers. -Finding funds for your staff when necessary. -Supporting travel monies to prestigious conferences. 	<ul style="list-style-type: none"> -Staff workshops to help new faculty members prepare successful research grant proposals. -Research institutes which help generate funds. -Faculty research committee. -Small grants to department heads for research, to set an example as a role model. -Travel funds: one for graduate students to present papers, the other for faculty members to attend prestigious conferences. -Putting pressure on people to participate and get research grants. -Recognizing the successes of colleagues, you cannot be putting down your colleagues. -Academic review process and day-to-day monitoring. -Peer review of research. -Support for post-doctoral fellows and graduate students. -Only provide release time for research when absolutely necessary to the project being undertaken. 	<ul style="list-style-type: none"> -Set up a research committee and special interest area research groups. -Having regular research bulletins with information on grants and research in progress. -Reading and critiquing other people's work to improve quality. -Reviewing research grant proposals.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

4.8.3 General Activities to Improve Quality

Responses are summarized in Table 4.8.3.

Professional Faculties

A number of activities were commented on by professional faculties including setting goals and objectives for the forthcoming year, developing new sub-units of the faculty to separate service and academic areas of endeavour, establishing a different organizational structure (flatter) with team leaders for each year of study, using recruitment of new instructors to improve quality, and conducting faculty seminars and encouraging visiting professorships.

Additional activities for quality include focusing attention on problems using data on how the institution is performing and tying performance appraisals to the increment structure. Other activities include fostering a positive atmosphere or milieu, ensuring that traditions and culture should be supportive of quality, making your requirements for quality clear to staff, and having a communications specialist in the faculty to assist with sending out the message on how the faculty is performing.

Table 4.8.3

Activities to Improve Quality in General

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Develop sub-units of the faculty to separate the academic and service areas. -Different organization structure - team leaders for each year of program. -Recruitment is used to improve quality. -Faculty seminars. -Visitor's programs. -Focus attention on problems using data on how the institution is performing. -Set goals and objectives for the forthcoming year. -Foster an atmosphere, milieu, traditions and culture around which academic performance will be measured and seen as positive. -You must make it clear that not only do you expect quality, you demand it. -Have a communications specialist in the faculty. 	<ul style="list-style-type: none"> -Some people are better at committee work than others. 	<ul style="list-style-type: none"> -Some areas act as facilitators to other areas of the university. -Units must evaluate their services in a formal way, through research projects as well as informally through interviews and customer feedback. -Has to be more commitment throughout the university with respect to evaluations. -People talking about quality. -seminars to build skills in a variety of areas. -having a strongly worded university mission statement. -Policies and guides to set out basic standards.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

General Faculties

General faculties mentioned that it was important to have those that are better at committee work participating in it.

Administrative Areas

Administrators suggested the use of formal as well as more informal methods of feedback to improve quality, holding seminars for faculty members, developing mission statements for the university, and being more consistent throughout the university with respect to faculty member evaluations. Other ideas included encouraging people to talk more often about quality, and setting policies and developing guidelines which lay out the standards more clearly.

4.8.4 The Effects of Accreditation on Quality

Responses are summarized in Table 4.8.4.

Professional Faculties

A number of benefits as well as problems were cited pertaining to accreditation as a useful way to support quality. Benefits cited by professional faculties include the situations whereby if students are licensed, they are often able to move across the country without further examination. Accreditation was seen as beneficial as it allows a faculty or department to put pressure on the central administration for more

resources to assist in maintaining their accreditation. Accreditation allows a comparison to national standards. Without it, you must rely on external reviewers to identify strengths and weaknesses. Problems identified with accreditation by professional faculties included the amount of time and effort involved in preparing background documentation for the accreditation visit, as it is a long and tedious process, a concern that accreditation uses largely input measures and does not provide a complete picture of what is happening. Accreditation may not necessarily measure quality appropriate to the profession or university and there was concern that these studies may operate with a different agenda than that of the university.

General Faculties

General faculties see accreditation as beneficial in providing constructive criticism and in providing a useful benchmark for them. The study is a process evaluation that provides standards and lets you know if you are in the ballpark. You are able to get a feeling if the process is good or not, which gives you some assurance that the outcomes will be satisfactory. Problems cited by general faculties are that there is no evidence that outcomes are any better or worse because of the accreditation process. There was concern that accreditation produces structures and situations that are quite rigid and resistant to change and a concern that it may muffle creativity.

Accreditation is seen by some as a ploy to maintain program funding for courses with low enrolment, as they are required for accreditation purposes.

Administrative Areas

Administrators see accreditation as valuable in setting standards and in requiring the external review of programs. There seems to be some concern as to the level of appropriateness of the standards.

Table 4.8.4

The Effects of Accreditation on Quality

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -When tied to licensure, graduates can move across country without further examination. -Allows faculties to put pressure on central administration for more resources. -Useful to compare to national standards without it you have to rely on external reviewers; it is very helpful to outline strengths and weaknesses. -A way to assess quality. -Have to prepare documentation ahead of time. -Long and tedious process. -Uses largely input measures but does not look at the complete picture. -The measures of quality may be appropriate to the profession but not the university. 	<ul style="list-style-type: none"> -Provides constructive criticism. -Provides a benchmark. -Process evaluation - if the process is good, you have some assurance the outcomes will be. -Sets standards, you know you are in the ballpark. -No evidence that outcomes are any better or worse because of the process. -Creates structures and situations which are quite rigid and resist change. 	<ul style="list-style-type: none"> -Sets standards. -Provides an external review. -Are the standards appropriate?

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

4.8.5 Experimentation to Create a Quality Environment

A large number of comments were provided about the experimentation to create a quality environment. The responses are summarized in Table 4.8.5. These are areas where faculties are trying new ideas to improve their quality. Some ideas cited include working with industry groups and associations, obtaining feedback from students, being relevant in service activities to meet needs, reviewing of research proposals by peers before submissions are made, conducting annual reviews of department heads, assisting new staff to develop teaching materials, ongoing regular exchanges between universities and their faculty members, undertaking special studies to improve research, conducting special programs of directed research on topics of interest, providing support for young researchers and student researchers, providing special travel grants, encouraging partnership programs, encouraging mentoring programs with senior faculty mentoring junior, utilizing expertise on international projects and allowing professors to teach in their specialized areas to ensure that they feel comfortable in their courses. Other experimental areas mentioned include establishing endowed chairs, research institutes and centres for excellence, raising dollars outside the university to support activities and appointing influential external people to raise the profile of the faculty.

Table 4.8.5

Experimentation to Create a Quality Environment

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Working with industry groups and employers. -Reviews of various things such as tenure and promotion, admissions, graduate follow-ups, employee surveys. -Obtaining student feedback. -Maintaining contact with professional associations. -Using standardized instruments for evaluation. -Doing peer review of research proposals. -Undertaking annual reviews of department heads. -Quality assurance with respect to teaching. -Assisting new staff with developing their teaching materials. -Establishing curriculum committees. -Encouraging regular exchanges of faculty with other universities. -Conducting special studies to look at improving research. -Establishing special directed research programs. -Supporting young researchers and student researchers. 	<ul style="list-style-type: none"> -Working with high schools. -Presenting papers for publications in seminars. -Providing a safety net for first-year students. -Sharing of equipment. -Establishing seminars for teaching and research. -Undertaking curriculum reviews. -Providing quality space. -Establishing a resource centre. -Bringing in visitors. -Extra support provided for research. 	<ul style="list-style-type: none"> -Using telephone registration. -Undertaking faculty evaluation. -Doing a job assessment. -Undertaking peer evaluation of professors. -Having an emphasis on the transition year. -Undertaking better orientation for new students. -Establishing total quality management projects. -Conducting staff meetings. -Using desktop publishing for publications.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

Table 4.8.5

Experimentation to Create a Quality Environment

PROFESSIONAL	GENERAL	ADMINISTRATIVE
<ul style="list-style-type: none"> -Using the committee structure of the university to make everyone familiar with what the faculty does. -Developing partnership programs with practical projects. -Senior faculty mentoring junior members. -Sending faculty members to conferences on teaching excellence. -Encouraging international projects to increase awareness. -Making sure professors are teaching in their specialized areas and feel comfortable. -Establishing special endowed chairs. -developing research institutes and special research groups. -Establishing a computer network. -Organizing centres for excellence. -Creating nil appointments within the faculty for influential people. -Raising dollars outside the university. 		<ul style="list-style-type: none"> -Upgrading credentials of staff. -Providing funds to support conference attendance. -Establishing partnerships with industry. -Providing better access to information on teaching. -Using distance education. -Organizing a research committee to help staff with their research programs. -providing an improved reward system for teaching, rather than research. -Creating an endowment fund.

(Note: Summary quotations by respondents in professional and general faculties and administrative areas)

General Faculties

General faculties have been working to improve quality by working with high schools, using seminars to present research results, providing a safety net for first year students, holding seminars on ways to improve research and teaching, conducting curriculum reviews and by having those good at teaching and/or research and/or service emphasize two out of these three as important. Structural areas to improve quality include having quality space for the faculty, the establishment of a student resource centre and bringing in visiting professors.

Administrative Areas

Administrators cite as important to process quality improvement activities such as telephone registration, faculty evaluations, job assessment, peer evaluation of professors, an emphasis on student orientation and the transition year for students, total quality management projects, regular staff meetings, courses to assist with upgrading teaching skills, desk-top publishing for faculty publications, distance education, upgraded credentials for staff, better access to information on teaching for professors, and improved student advising. Other related areas for quality experimentation are the establishment of research committees to help staff with their research programs, special conference rooms, a nice physical environment and an improved reward system which emphasizes teaching rather than research.

The next chapter contains a review of some of the more important factors mentioned during the interviews as impacting on quality. A model for quality improvement will be developed from these quality factors.

5.0 - DISCUSSION OF THE RESULTS

5.1 Introduction

Chapter 4 discusses the data distilled from the interviews which were displayed in a tabular format and arranged to demonstrate quality perspectives held to be important by the interview subjects. The data collected from interviews with deans, administrators and other university personnel suggest a number of important points about the subject of quality in a university setting. These data indicate several ways in which the university and its faculties define and go about quality improvement. As Tan (1986) suggests, there is no clear definition of how quality should be defined or in what manner universities can best go about improving their quality. This research has provided some insights into this situation. From this information, it is possible to speculate on the essential elements for a strategic approach to quality improvement in a university setting.

Popular definitions from the quality literature (Garvin, 1984; Deming, 1986; Crosby, 1979, 1984; Juran and Gryna, 1988; ASQC, 1983) were useful in defining the initial research plan and in preparing the interview framework. These quality definitions have proved valuable in identifying that total quality concepts such as viewing the client of the system as a customer are now beginning to find their way into the quality language and thinking of the university. In a number of interviews, it had been

mentioned that students need to be treated as customers, rather than as a burden to the system.

Quality in teaching, research and service has been widely identified in the education quality literature as an essential element of university activities (Bowen, 1974; Gardiner, 1992; Webster, 1990; Smith, 1991; Boyer, 1990; Sheffield, 1982; Mayhew, Ford and Hubbard, 1990). Chaffee (1990) suggests that there is a critical need to improve quality in universities. This finding is supported by the informants who suggested that quality was very important to them by identifying a large number of activities to improve quality.

Factors critical to quality improvement in universities include the complexity (Thompson, 1976; Gleick, 1987) their culture (Wilson, 1989), their structure (Huber and McDaniel, 1986; Mintzberg, 1989), the goals and mission of the university (Wilson, 1989) and the nature of university activities as a type of service industry (Sifert, Benton, Ritzman, 1992; Schwartz, 1991). One of the reasons that this research has been conducted is that the exact role these factors play in university quality has not been clearly defined in the literature. This study found that all of these factors are important to quality. This importance will be elaborated upon later in this chapter.

Quality measurement is an important part of quality improvement (Kirkpatrick and Locke, 1992; University of Manitoba, 1993). Studies have been conducted into quality

by measuring the reputation of universities (Webster, 1981; Astin and Soloman, 1981) suggest that this reputation is transferable as a surrogate measure of perceived quality. Other quality measures use objective indicators (Webster, 1990; Brown, 1989, Lindsey, 1991; Ory and Parker, 1989 and Seneca and Taussig, 1987 and Cook, 1989) to measure the level of quality. Correlational studies (Rogers and Genteman, 1989; Volkwein, 1989, Fairweather, 1988; Cameron, 1985 and Kealy and Rockel, 1987) use a variety of indicators to identify factors which correlate well with quality. This research study has identified the following factors as critical to quality: faculty culture, organization politics, organization structure, type of faculty, mission and goals statement and quality in administrative areas.

While it is important to be able to measure quality, assessing quality in a university may not assist us with understanding the manner in which factors impact on quality or assist with the identification of what must be done to improve quality. Existing measures may not always provide the type of information needed for us to develop an improvement strategy.

The tabular displays in Chapter 4 have illuminated the differences in views about quality in teaching, research and service held by professional faculties with their particular history and ethos, as compared to general faculties and administrative units. Understanding differences in these three perspectives is useful in identifying those

elements essential to quality in a university. This aids the development of a deeper understanding of this complex issue.

This chapter will identify salient relationships and factors stated as pertinent to a quality climate which have emerged from the interview data. A strategic quality model will then be developed to link climate factors with other processes for quality. Chapter 6 will speculate on options and future directions for quality research in universities.

One of the problems with using qualitative research methods to collect data is their lack of a standardized and generally accepted model or format for analysis. It may be difficult when using qualitative methods to move from the hundreds of pages of notes, transcripts and other data collected at the research site through an analysis phase to a set of conclusions. The data in this study were analyzed and a search made for patterns. The researcher returned to the data continuously to see if relationships were confirmed by the data sources.

When qualitative research is used to develop emergent theory, it creates something that is testable. It has been suggested that concepts generated in this manner have an underpinning in the data and emerge from the evidence. They are empirically valid since they are closely tied to the data, and are consistent with empirical observation

(Eisenhardt, 1989). The greatest benefit of this form of model development is that theory developed in this manner tends to closely mirror reality.

The next section will review the research questions originally developed for this project.

5.2 Review of Research Questions and Salient Findings

This section will review data collected from this qualitative study in relationship to the original research questions listed in Chapter 1. These research questions were used as a basis for data collection in interviews conducted with key informants in the university under study. The following section details salient findings about quality.

Research Question 1: To what level do faculties articulate the meaning of quality in terms of mission, goals or objective statements;

Wilson (1989) suggests that the goals of university are ambiguous. This was confirmed by information collected from the interviews and the various mission statements obtained from faculties. It was found that many faculties do not have a role and mission statement and where one exists, it often fails to mention quality. Only six of nine mission statements mentioned quality or such surrogates for quality as excellence. While those interviewed stressed the importance of quality, faculty role and mission statements do not always clearly reflect this as a high priority. Without the common

focus and vision provided by a mission statement, it may be difficult to improve quality. McMillan (1988) has suggested the importance of clear goals for quality.

Research Question 2: how is quality measured for the three main processes of teaching, research and service;

The general consensus which has emerged is that for research, there are appropriate and adequate measurement techniques which act as quality control safeguards. These are built into research processes through the existing peer review process. Research which is peer reviewed before publication in first rate journals must, by definition, be of high quality. This confirms similar ideas by the University of Manitoba (1993). Research is a key activity (Gardiner, 1992; Smith, 1991) and is the basis from which other activities flow. Research has a long gestation period and some persons only want to publish when they have significant work completed. A great deal of dialogue goes on among researchers of both a formal and informal nature. This discussion can assist in improving the products of research. In some areas, activities related to the profession are viewed as applied scholarship (Boyer, 1990). The assessment of the value of these activities would seem to remain problematic at this time.

While teaching is the first priority of a university (Smith, 1991), there was significant concern expressed about the inadequacy and inappropriateness of methods presently used to evaluate teaching quality. Without adequate measurement systems for teaching quality, it is difficult to know where to begin to improve. Part of this difficulty in

developing measures may arise because teaching must bring about some form of desired changes in people. It may often be difficult to articulate what is really desired and then formally measure any results which occur (Bowen, 1974).

Several of those interviewed considered the measurement of service to be of little importance, given its lower status compared to teaching and research and its lack of importance as a criteria for tenure and promotion. While service serves society and reshapes it (Boyer, 1990), service is considered to be a by-product of teaching and research.

Research Question 3: does the type of faculty (e.g., professional versus a general faculty) impact in any way our thinking and arrangements for quality;

The data gathered suggests that the types of activities which professional and general faculties do and how they do them may be different. Professional faculties are often practice-based and have closer ties to their professional community and discipline.

They may also expend a significant amount of time in service related activities applying the knowledge and skills of their profession. According to Bowen (1990) all activities relating to the study, review, synthesis and analysis of knowledge are part of scholarship. Their close contact with their constituents because of the nature of their activities provides professional faculties with continuous performance feedback.

Professional faculties often develop on-going methods of integrating their community into faculty decision-making processes by involving key stakeholders on faculty

council or advisory committees. Some professional faculties may not have a long history or culture supportive of research and scholarship. Professional faculties with an accreditation process or the licensing of their graduates have a built-in system of performance assessment to provide a regular feedback on quality. However, the literature has suggested that accreditation is little more than professional backscratching (Bogue and Saunders, 1992).

While the members of general faculties may be involved in a variety of discipline related professional associations, they may not always have the same kinds of ties to practice in the community as do professional faculties. Thinking in general faculties is often shaped by their additional responsibilities for service teaching and their strong research culture. Academic program review often serves to provide a type of quality control (University of Manitoba, 1993; Cyert, 1991; Bogue and Saunders, 1992).

Despite these differences, both general and professional faculties recognize the importance of quality. There was comment during interviews that while the type of faculty has no bearing on quality, it was believed that the value of general faculties is harder to measure.

Research Question 4: what specific structures, activities or processes are in place for quality improvement;

This study has found that this university is very active in improving its teaching and research. This ranged from tactics to improve teaching such as setting up special committees, improving communications, meeting with students to get feedback, conducting academic reviews, looking in more detail at student attitudes and interests, the development of programs to improve teaching, support professional development, using distance education, concentrating resources in fewer areas and establishing a teaching responsibilities policy. Activities to improve research include improving the infrastructure or establishing a research committee, setting up a process to improve research through joint and supportive activities, holding workshops on preparation of research grants, providing seed money and travel funds and peer review of research. More general activities for quality include the development of special subunits and creating different structures, making it clear that quality is important, and obtaining feedback on performance. As Fairweather (1988) suggests, the measurement of quality in academic programs is elusive.

Research Question 5: where does the responsibility for leadership in quality lie in the university;

The one theme emerging from the interviews is that quality is the responsibility of everyone in the institution. Everyone must be involved in quality improvement activities and each has a role to play in quality improvement.

Quality took on greater salience for the central administrative areas and deans, who believed that they play a special leadership role. Interviews suggested that there exists disagreement about roles and responsibilities for quality improvement. There was a belief cited that quality activities must be owned and accepted by faculty members within a unit to be successful.

Research Question 6: What role do university requirements play in directing faculty quality activities?

Some improvement activities are very broad in their scope, like the centrally mandated requirements for a faculty member performance assessment system where each professor has their performance assessed in some manner each year. The responsibility to implement a system appropriate to individual faculty needs remains with each faculty. There is a common concern among those contacted about the inability of any system mandated by the central administrative unit. There was general agreement by those interviewed that the central administrative unit does not provide a great deal of leadership for quality, except by encouraging quality through the redirection of funds to support quality efforts or by making policy decisions to mandate activities to improve faculty quality. These results corroborate Astin's (1991) suggestions that organization structure is not a key ingredient of quality improvement.

Research Question 7: How do university administrative processes, budgeting processes and collective agreements impact on quality activities?

While administrative units are viewed negatively by many, they were seen as having an important role to play in improving quality. Administrative policies and rules ensure fairness and equity in the treatment of individuals and units. Rules also add checks and balances to the system. There was concern that too great an emphasis was placed on administrative policies which can have the effect of stifling creativity and may have a negative effect on the quality of teaching and research.

Budgeting processes were generally viewed as favourable by those interviewed, although there was some concern over the level of secrecy of the decision criteria used. Although the results of budgeting exercises are sometimes viewed negatively, the process itself was deemed to be a fair and impartial one which delegates substantial freedom to faculties to operate within prescribed limits.

Interview results suggested that unions had an overall negative impact on quality and effectiveness; supporting the findings of Cameron (1985). Collective agreements were found to provide a basic level of fair and equitable treatment for everyone but were believed neutral in their impact on quality.

Research Question 8: What role does accreditation play in ensuring quality?

As suggested in the interviews and supported in the literature (Bogue and Saunders, 1992), accreditation has an important quality role to play, primarily in professional faculties. There was concern expressed by some faculties not having accreditation that it is sometimes used to lever additional funding from the administration if a faculty is in jeopardy of losing their accreditation. Accreditation can provide a benchmark for quality, but may entail a great deal of preparatory work.

Research Question 9: Does the culture of the faculty (i.e., the values, beliefs, symbols and unwritten rules) play a role in quality?

Those interviewed have identified culture as having an important impact on quality. Faculties may have a culture slanted towards research, or a culture of teaching or community service or may exhibit the culture of their particular profession or discipline. Culture can have an important influence on the faculty's orientation towards quality as supported by Wilson (1989) who found that the order, atmosphere and ethos are important.

Academic culture plays a significant role in how faculty members perceive quality initiatives and their openness to participate in them. Culture may prove detrimental to teaching quality in those situations where there is a research oriented culture and vice versa. In this type of situation, new faculty members may be faced with conflicting

goals, when, for instance, quality in teaching is not considered to be as high a priority as quality in research.

Research Question 10: How do organizational politics aid or inhibit quality?

Organizational politics are often perceived as having a negative effect on quality. They can inhibit quality if the power exercised by individuals is believed to not be exercised in a selfless manner. Politics may create a barrier to quality if they create fractional groups and a lack of trust.

Research Question 11: What are the critical roles with respect to quality in the faculty or institution?

Those interviewed suggested that everyone has some measure of responsibility for quality. There seems to be a lack of agreement as to the specifics of roles and whose role takes precedence. While administrators believe that they have the primary role to play, others in the university also believe that their roles are critical.

There was a suggestion of the importance of mentoring as a method to improve quality. In mentoring, those identified as exceptional in their abilities act as role models and work cooperatively to improve the skills of everyone.

Research Question 12: What barriers exist to the improvement of quality of research, teaching and service?

Many barriers to quality were suggested. Some of the most salient centred around the beliefs of people, which may negatively affect actions to improve quality. Also mentioned were artificial boundaries between faculties creating compartmentalization, a lack of sufficient financial resources to support quality, inappropriate organization structures for effective quality improvement, too much bureaucratization and a lack of policies or guidelines supportive to quality activities. The large number of barriers mentioned in response to this question suggested that barriers exist and are an area of great concern.

5.3 A Climate for Quality in Universities

The purpose of this research has been to conduct a qualitative study to explore how a university and its faculties go about their activities for supporting and improving quality. The meaning of quality in this research study was as defined by the informants. No attempt was made to impose a definition on study participants. Quality improvement activities cited by those interviewed have been used to identify what is presently being done to improve quality and to identify salient factors impacting on quality.

An analysis of the interview data has identified a common thread running through the data. There is a similarity among the factors cited as important for a quality climate. The word climate is used to define the type of environment remarked on during the interviews as having an important impact on quality in a university setting. These quality factors have been identified by sifting through the interview data. These are factors which in some faculties may be quite positive in their influence on quality, while in other faculties their impact may be negative. Some of the comments cited as important in the interviews are displayed in Table 5.3.1 to Table 5.3.6.

An enormous amount of evidence was collected in support of each factor.

The six factors which seem to have the greatest salience for quality are:

1. The existence of a mission and goals statement which clearly states the importance of quality,
2. Faculty structure,
3. Type of faculty,
4. Administrative processes,
5. The faculty culture,
6. Organizational politics.

These six elements of a quality climate came out of various areas of enquiry in the research. The next sections will discuss each climate factor in more detail.

5.3.1 Mission and Goals

The importance of a clear statement of quality goals was cited as a need for clear and objective criteria for which everyone can be measured and held accountable. Well defined quality criteria were seen as essential to the measurement of quality. A quality vision is stated in the Baldrige (1991) criteria as important. Without clear goals, it may be difficult to focus on quality and it may not be clear what to measure and where to start to improve. Thus a clear statement of quality mission and goals is an essential element of any positive quality climate. This coincides with Fincher's (1988) stated need for clear goals to allow the assessment of any unintended results which may be produced.

Of the 16 faculties where interviews were held, a total of nine mission statements were provided, six mentioned quality and three that did not mention quality in the statement. It is interesting to note that the mission statement of this university has been recently revised to mention quality as a critical element.

Faculty members must be certain as to what is to be rewarded for the purposes of tenure and promotion; teaching, service, or research activities. There was some concern that sometimes, only "lip service" is given to the importance of teaching, while, in the final analysis, it is the research effort that is rewarded. Astin (1993) suggests that as long as faculties must simultaneously do teaching, research and

service, then teaching and advising will receive a low priority. In some faculties, an undervaluing of teaching is seen as sending out a mixed message to faculty members as to where to concentrate their effort. This negative message emerges in the comments of interviewees about their "research opportunities" and "teaching load".

While excellence in research gives more freedom to do research, excellence in teaching does not. This creates a problem if teaching is not well rewarded (Boyer, 1993).

Some points pertaining to mission and goals and a quality climate are arranged in Table 5.3.1.

Table 5.3.1
Mission and Goals and a Quality Climate

<ul style="list-style-type: none"> -Positive for a quality climate is having objectives in your course outline, sticking to them, includes the affective, cognitive and behavioral domains of the student, must be based on objective and semi-objective criteria upon which we can measure quality. -Specifying goals and defining objectives to change behaviour, knowledge, skills. -Ensuring that faculty members know what the criteria are and what they are to be held accountable for. -Units want to know what quality performance and the criteria are. -Quality is when you achieve the criteria, whatever they are. -Negative statements about quality climate are that God only knows what criteria are used to define quality, we are trying to measure something that is not measurable, we do not address quality systematically, criteria are nondescript, soft, not articulated clearly and lacking in specifics, where no measurable criteria are articulated and the specifics are lacking, where there is a lack of consensus on what is legitimate and valid research, where it is not clear what productivity is, especially for a tenured or full-professor, there is little means of assessing activities and deciding whether professors are productive enough.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

5.3.2 Structure for Quality

Within the university, quality leadership starts at the top with the central administrative unit suggested as having a key leadership role. Internal to each faculty are factors such as the skills of faculty members and their values for quality. These are considered important in creating a climate conducive to quality.

University administrators believe that central administration units have the primary role in quality. Some faculty members, on the other hand, suggest that the administrative unit role is less important. Administrative units have a function of setting broad policies for quality, from which faculties then take appropriate action. Administrative units may only be able to have an indirect influence on what takes place in faculties, a role of lesser importance than administrators may desire. The most important quality decisions were suggested as those being made at the lower levels of the institution hierarchy at the interface where faculty members meet with their students during teaching and research activities.

The responsibility for quality was believed by some to be centred internally to a faculty or unit, and by others to be an externally focused responsibility. The predominant belief from the point of view of either professional or general faculties is that quality is an internal faculty responsibility. For those that thought that quality

was an internal faculty matter, it was suggested the dean should set the overall tone while faculty members need to take greater responsibility to improve quality.

Service teaching policies can create problems when professional faculties make substantial demands on general faculties for service teaching. While this policy emanates from the interdisciplinary nature of teaching, it is seen negatively by general faculties as impacting on their quality by taking resources away from teaching activities which may be considered of greater priority.

There was a suggestion that smaller faculties had greater control over a number of things which directly affect their quality such as entrance requirements, allowing them to select better students. Cited as a positive catalyst for quality was the greater comradeship and family feeling in a small faculty.

Organizational structure creates barriers to quality through the long time frames required to make curriculum changes, generally two or more years. Inter-faculty obstacles also come into play when attempting to modify or introduce new curricula as well. These can act as barriers to the improvement of quality and may create a climate not supportive to quality.

The involvement of people in quality improvement activities is essential to the success of any strategy for quality improvement. There is considerable agreement by those

interviewed that everyone in a university has some measure of responsibility for quality, starting at the top with the president and senior administrators and moving downward in the hierarchy to the deans, unit heads, faculty members and from there to the students. There is a chain of responsibility for quality which, when broken, may result in a reduction in quality.

If the quality system breaks down, who then has the primary responsibility for fixing it? While it is suggested that quality is a collective exercise, there has been some uncertainty expressed during interviews as to whether anyone has the primary role for improving quality. While deans and unit heads believe that they have a major role in making quality happen, senior university administrators suggest that theirs is the most significant responsibility for quality. This role conflict between areas may lead to problems in trying to develop a plan for quality improvement. The climate may not be conducive to quality in this situation.

One area of positive influence on faculty quality is the use of role models and mentoring to enhance quality. This was seen as a simple but effective way of improving quality in teaching and research for little or no cost. Faculty members identified by their peers as excellent can assist others in improving the quality of their research and teaching. They serve to model the behaviours known to be successful in quality teaching and research.

Information on organizational structure factors are listed in Table 5.3.2.

5.3.3 Type of Faculty

Type of faculty has been suggested as an important factor to consider as affecting the quality climate. Things such as the size of the faculty and whether it is professional or general in nature are all important to consider in a plan to improve quality. There was some suggestion that type of faculty can impact on quality by changing the viewpoint or perceptions of the importance of other factors. It is important in shaping a culture for quality to understand the subtle differences as to how faculties view different factors. Information on type of faculty climate factors is described in Table 5.3.3.

Table 5.3.2

Organizational Structure Climate Factors

-a positive climate for quality is when the president sets the priorities, ensures the overall mission and sets the tone, the vice-president academic ensures that staff are meeting standards while deans advocate for quality and professors work to help students, the president models the behaviours he wants the university to represent, vice-president academic is a more direct influence on quality and needs to let faculties know if they are achieving at an acceptable level, the vice-president academic articulates values and goals.

-leadership for quality comes from the faculty association/union as well, the faculty association should assist in quality but no leadership is shown.

-all faculties have a responsibility - but central administration has the responsibility to critique, central administration makes the long range decisions - focusing on what the university is good at, the central administration provides the leadership and takes a role in setting direction, the administration is in a better position to define with expert assistance what excellence in teaching is, the executive of a department is the most important and they must be on-side and committed to excellence, the central administration support quality by providing some guidelines.

-employers have a role to play with quality as do organizations representing professional organizations.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.2 (Continued)

Organizational Structure Climate Factors

-quality starts from the dean working with unit heads, there needs to be commitment from each individual faculty member, there is a link from deans to associate deans to faculty members, the deans are responsible primarily but it goes down the pyramid, deans have a great deal of power.

-the research responsibility lies with each particular unit, the head of the unit/dean sets expectations and encourages, research lies with the unit heads, they must lead by doing and enlist the loyalty and support of colleagues, department heads must create an environment with the proper morale and teamwork, the departmental component for quality includes cohesiveness, leadership and committees, for teaching, the head as well as professors recognized as good take the lead, departments must protect students from bad teachers.

-Need an infrastructure to support research, academic faculty should be allowed to decide on excellence in their discipline.

-the responsibility for quality lies with everyone, all are responsible, quality is a collective exercise, you have to pull vested interests together, everyone from the top down to the student is responsible for quality, individuals are totally responsible for their own teaching and research, professors must be self motivated and are quasi-independent, it lies with the people themselves, is there a role for anyone other than individual?, responsibility comes from the concern of acting as a profession, it lies with disciplines to judge impact and quality of research, the administration has a job to evaluate performance, people are professional academics and quality is a question of professional pride.

-we need to get quality people into the system, quality depends on a metabolism of people, as there are good people and there are less good, committees perform at "the level of their least performing member".

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.3

Type of Faculty and a Quality Climate

-professors in professional faculties may interface more with industry, government and other professors. You see other standards and this allows for faster adaptation to changing circumstances, the whole area of quality of practice in a profession is different. The type of teaching and research and graduates are different in professional faculties and the practice of the profession is important as it includes the preparation of people as well as the study of the practice, in professional faculties you are more concerned about the professional discipline and theoretical structures related to it, professional faculties have a jury watching of active and powerful professional organizations that constantly assess their curriculum and graduates, this level of criticism does not exist for core faculties, professional faculties are more likely to insist collectively on standards and measures, the majority of graduates are destined to practice, and there is a built-in system of feedback from employers, there is an enhanced responsibility to serve the public and protect them, some faculties have the added professional responsibility to ensure the competence of professionals to practice.

- negative is that fact that work often overlaps service roles which are externally grounded in the real world, and this can be an excuse for not getting down to the business of quality.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.3 (Continued)

Type of Faculty and a Quality Climate

-Positive to quality in smaller faculties is that there is more comradeship, they take care of their students better and there is better quality, smaller faculties also have more latitude over entrance requirements, they can be more selective of students, larger faculties have less control over entry than professional faculties who control their entry, unlimited enrolment faculties have problems.

-some professional faculties have a greater responsibility for research programs which results in reduced teaching loads, the clinical component of some programs require unique teaching strategies, external demands for professional training can drive the faculty, especially when you are the only faculty in the province.

-general faculties have small endowment funds compared to professional faculties.

-a negative climate may be created when many students come from other faculties due to the service teaching policy. There is a feeling that they are not real students - they do not attend because they want to study an area in depth, they are in entry level - basic disciplines, this can cause many problems, the professional faculties make demands for service courses that general faculties must meet and pay the costs of the other faculty's programs. Needs external to the faculty must be balanced with those internal to the faculty.

-Many programs are introductory to the university, or act as a transition or an interface between high school and university disciplines.

-Also negative to climate is a scarcity of resources - if there are more students - they get less attention from the instructor.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.3 (Continued)

Type of Faculty and a Quality Climate

- Core or general faculties are less accountable externally, and have less reason to be pushed to be excellent, while the type of faculty has a bearing on the type of work done, faculty type does not influence quality.
- Negative factors are the question as to whether all professional programs belong under the university, or elsewhere and the belief by some that the work of some professional faculties may belong more outside the university.
- Since some types of research is more fashionable than others, research dollars are not necessarily a good proxy of quality as some disciplines may get more favoured treatment, and that may impact on quality.
- Isolation between faculties is a problem, some faculties are geographically separate from others, there are no linkages as units are independent.
- Licensing bodies are independent and provide feedback on quality. If there is no licensing, the onus is on the faculty to prepare the students.
- Some parts of the university are in competition with the private sector.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

5.3.4 Administrative Factors

Policies are important to the improvement of quality. Rules help define what goes on internally within faculties as well as externally in the central administrative unit.

Rules may negatively impact on the climate for quality when they create an atmosphere which is overly rigid and bureaucratic in nature. Several ideas were suggested in the interviews about how administrative factors can positively impact on the climate for quality.

Administrative processes are generally not seen as being helpful to the pursuit of quality. They are believed to stifle creativity and take time away from more productive activities such as teaching and research. It was suggested that time should not be wasted on administrative sorts of things unrelated to the priorities of teaching and research. Negative aspects are a general dislike of performance appraisal and evaluation systems for faculty members, increasing bureaucratization of day-to-day processes, and the feeling that there is a growing trend for administrative paperwork to take more and more time and energy away from critical activities.

One area described as critical to quality is having appropriate support policies in place. Frameworks such as a teaching responsibilities policy were seen to positively affect the quality of both teaching and research by setting out the basic duties and responsibilities of all concerned. In some faculties, policies were believed to favour

the research endeavour to the detriment of teaching. There was some concern that too much weight is placed on research quality for tenure and promotion purposes and not enough of an emphasis is being given to the quality of teaching. If this is true, there would seem to be a need to rethink these priorities with a more appropriate weight being given to teaching, research and service respecting promotions.

While university administrative processes were cited in the interviews as having a mostly negative impact on quality in faculties, there were some benefits cited as coming from the delegation of responsibilities to faculties to give them greater control over their operation and the increasing democratization and the collegial nature of decision processes through the use of committees.

Collective agreements are considered as having a positive influence in keeping processes honest. They insist on accurate measures and provide a level of generic accountability and protection. Collective agreements provide safeguards and a level of fairness and justice for all concerned.

There are several negative factors perceived to be associated with collective agreements. Collective agreements are perceived negatively by some administrators as removing managerial flexibility. Administrators view unions as resisting attempts to improve quality by not supporting the introduction of systems to evaluate faculty member performance. These negative aspects often emerge as a them and us feeling,

which is confrontational and not collegial and may be evidenced through a lack of reasonableness and movement away from the consensual values which a university is supposed to espouse. Collective agreements are seen by some as negative in that negotiations with the union may be hostile, creating an adversarial condition not supportive of a quality climate. The collective agreement has many rules which may have the effect of stifling initiative.

Accreditation is a quality assessment and improvement tool tied most closely to professional faculties, but in some instances may relate to general faculties as well. Accreditation of a faculty or program is often tied to the licensure of graduates. Accreditation requires that courses meet national standards, ensuring a basic level of quality performance. Constructive criticism is provided to the faculty during this regular review process to identify areas for improvement. It can also have the positive benefit of providing supporting data to allow a faculty to put pressure on the central administrative unit for additional resources.

There are some problems with the accreditation process such as the large amount of preparatory work needed and the fact that there is no real evidence that the actual outcomes from these programs are any better or worse because of the existence of the accreditation process. In fact, accreditation may act to stifle innovation by causing faculties to follow accreditation criteria too closely, making them reluctant to initiate new things.

University budget processes are seen by some to provide an opportunity for the institution to examine its priorities. Budgets may encourage quality through a rethinking and refocussing of attention. The use of a decentralized budgeting process where faculties are in charge of all aspects of their particular budget was seen as important as was the freedom given to faculties to raise their own funds externally if necessary.

The budgeting system of this university was cited as not being trusted, with the criteria used for the allocation of funds unknown and believed mysterious. There was a belief cited that those who know someone in the central administrative unit may do better in their budget allocation than units who do not know anyone.

A major concern was the need to prioritize and take major decisions about the reallocation of resources. There was some comment that these types of decisions were not being made and that there was a lack of leadership being shown by administrators. Concern was expressed that the university was slowly being bled to death everywhere and there was a need to make "vertical amputations" of less important units to ensure the viability of the remaining faculties and units. There was also a suggestion that not all faculties and areas of endeavour are of equal value, with resources needing to be shifted to those areas doing the "real" work of the university. It was suggested that the university may be having difficulty in setting its longer term priorities and in

deciding on which units may have the best future so that this reallocation of funds can occur.

The workload of faculty members is a general factor pertaining to resources which directly impacts on quality. Workload presents a barrier to the improvement of quality. As resources are reduced, teaching supports such as markers and clerical support are eliminated, increasing faculty workload. This has a direct impact on the quality of teaching and research activities. In addition, new faculty members are now required to take on a greater workload than those hired in the past, leaving them with less free time to establish their research program or adequately prepare for their new teaching responsibilities.

Budgets were seen by respondents to play an important role in supporting quality initiatives and ensuring that research and teaching infrastructure is appropriate. It was suggested that adequate funds need to be allocated to support quality initiatives. Units who indicated that they had an adequate research infrastructure believed that they were more successful in attracting research grants than those areas where the research infrastructure was not so good. Research infrastructure seems to have an important role to play in sustaining a high quality viable research program.

The quality of teaching and research is believed to be directly related to the amount of resources allocated. Those interviewed suggested that greater allocations of resources

result directly in increased levels of quality in a faculty, while the withdrawal of resources directly reduces quality. Some interviewees were unsure about the relationship between levels of resources and the level of quality and suggested that this was an extremely complex relationship.

Administrative factors are therefore very important in creating a climate for quality as indicated in Table 5.3.4.

Table 5.3.4

Administrative Factors Supporting a Climate for Quality

- willingness to fund initiatives in the direction of quality is important, you need support and the necessary resources to enable quality, which should give reasonable quality, departments are fighting for dollars and the dean must decide on priorities.
- budget cuts create uncertainty and a negative climate, people are afraid of losing their job, it is not clear on what basis judgements and evaluations on budget allocations are made by central administration, archaic equipment not replaced in a timely manner, supplies budget affected most, too late in the year when we find out about next year's budget.
- There is increasing democratization through the use of committees to make decisions, administrative processes are of a collegial nature, everyone is meant to be involved.
- People fail to take the action they should and processes are not customer oriented, very little about the university is.
- Faculties are responsible for themselves academically.
- Continued movement towards reduced service, output and mediocrity with budget cuts.
- People do not want to take risks.
- Difficult for an administrator to challenge if faculty are not performing, they often do not want to resolve personnel problems.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.4 (Continued)

Administrative Factors Supporting a Climate for Quality

- There is a need for a framework to support quality such as offering programs in offbeat hours and offbeat locations, proper reward systems for good professors, systems to ensure students are heard, streamlined mechanisms for research.
- There are more and more exemptions from exams, these types of rules decrease efficiency, rules create barriers for access.
- There are problems with movement of staff in administrative areas.
- the decentralization of power enhances quality, often there are power struggles between units, but there is no recourse to appeal, leaving autonomy to the faculties is good, you need to be able to take courses across faculty units more easily. All units want to maintain their own internal integrity but it creates problems and reduces efficiency,
- too slow to change curriculum, but this delay allows for sober second thought, curriculum quality is impeded by long approval lines - there is a need to be able to make curriculum changes more swiftly than in two years.
- tying the increment structure to the assessment of faculty member performance causes problems.
- the institution is becoming bureaucratized, it sucks time and energy from everyone, it is a greedy institution, administrative factors can be anti-creative and stifling, you need an environment that turns professors loose. Administrative processes get in the way, instead of being helpful or supportive, administrative processes need to be kept to a minimum by compressing the amount of paperwork, we are spending too much time on things which are not really priorities and there are too many meetings.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.4 (Continued)

Administrative Factors Supporting a Climate for Quality

-the budget system is good for examining priorities, the university can indirectly encourage things through the budget, infrastructure support for research can create a supportive quality environment, through decentralized budgeting, deans get the dollars and take action, you are allowed to keep carry over which is a positive feature supportive of quality, there is flexibility to raise dollars externally, the budget process does not enhance quality as it is an exercise of how much will you lose, budget process is reasonably open and well understood, you need hard decisions to concentrate resources into those areas with the greatest future, budgeting is historically driven and you cannot respond quickly.

-fairly easy access to vice-presidents, short lines of communication and approval.

-Unions abuse the concept of academic freedom, unions protect individuals, whether justified or not, do not allow you to pay for a quality performance, unions often resist the notion of evaluation.

-Collective agreements make the process honest and insist on scrupulous and accurate measures they afford protection, and provide fairness and justice, collective agreements provide generic accountability and direction, and provide safeguards.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.4 (Continued)

Administrative Factors Supporting a Climate for Quality

- Problems with respect to setting and ranking priorities, we need to make amputations and vertical cuts. There are unrealistic cuts, we should shift resources to those units doing the real work of the university.
- The present financial climate does not create an atmosphere for creativity.
- People are lulled into complacency.
- knowing the right people in administration is important,
- It is not always clear that throwing dollars at the problem is the answer.
- the role of administration has to be less mysterious in how it allocates funds.
- There is less commitment from full professors, they turn to more meaningful things rather than being sucked into the institution.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

5.3.5 Culture

Faculty culture can create a climate which is either supportive or non-supportive of quality. There may be divisions of cultures between professional and general faculties or between those faculty members supportive of research whose orientation is scholarly versus those whose orientation is to their profession. Cultures can make it very difficult to develop a climate supportive of quality.

The culture, tradition and history of a faculty is seen as breeding conservatism and inertia. Universities are at the leading edge of knowledge, yet at the same time are conservative and slow to change; this is paradoxical. The culture of the university as a whole is very conservative, making it difficult to alter current teaching methods or take actions to improve. Universities tend to follow staid and safe paths of research activity, which may affect our ability to undertake innovative research in non-traditional areas. Research granting agencies are often more supportive of research that is in the mainstream of a discipline.

Deans have a critical role to play in improving quality. They must take a leadership role and work to inject enthusiasm into their faculty to pull a variety of vested interests together. While they may want to change the attitudes which exist within their faculty, they may be able to do little more than tilt the culture in the direction

they wish. It is a fact of life in a university setting that not everyone in a faculty may share the dean's vision of culture, and this may be difficult for a dean to accept.

We see the impact of differing cultures in professional faculties, which have close ties to the practice of their profession. Professional faculties may have close links to their constituents, assisting them in getting immediate feedback on their quality.

Professional faculties view the faculty culture as positive for quality as culture can awaken faculty members to a certain way of thinking about quality.

General faculties stress as positive for quality their collegial will to work hard and the strong quality traditions and ethos. Administrative units see the culture of some faculties as being positive and supportive of highly innovative research while others are not.

Attitudes have been cited as playing a very important role in quality. They may be identified as being negative towards quality as suggested through those attitudes which are anti change, or anti consideration for doing anything different, or through the types of negative attitudes which may exist among some faculty members who act threatened when the university attempts to implement a system of personal performance assessment. They are also the kinds of negative attitudes espoused by some who believe that once a professor gets tenure, they may no longer need to work as hard.

Negative areas of culture include the beliefs one faculty may have of others as being not as good in some way and a publish or perish mentality which denigrates the importance of teaching and emphasizes research as the primary activity of the faculty.

These negative culture attitudes can make themselves known through petty jealousies and bickering over resources, politicking between units and the notions one faculty or its members may have of each other. This can cause fragmentation and disharmony in faculties and departments, negatively affecting the climate and making it more difficult to improve quality.

Table 5.3.5 outlines some of the comments on culture that can impact on the climate for quality.

Table 5.3.5
Culture

-the culture is contingent on ideas which are products of time and place, an enormous amount of what we do comes from tradition and culture plays an important role, there is a tradition and history that has a positive effect on quality.

-with history comes conservatism and we are slow to change due to inertia, there is an aging professorate with a diminished interest in research.

-there may be almost as many views in the faculty of what quality is as there are faculty members, science is more elitist, scientists are not big on social science, scientists are results oriented, there is a publish or perish mentality, some faculty believe they have the right to undertake whatever they wish with respect to research, universities are supposed to be at the leading edge of change and ideas but the culture of the university is conservative, because of collegiality, we cannot get agreement and movement to change, research is driven by the availability of research funding which often directs the types and modes of research. This does not lead to earth shattering paradigm shifts.

-the dean has values for a quality program and plays a leadership role while faculty have their own goals and research needs, the dean projects the image of the faculty and there needs to be a commitment to quality in education, faculty members must value teaching but the focus has been directed at research, faculty members need pride in quality of their work, deans must inject excitement and enthusiasm, attitudes are critical to quality which must be a commonly held goal in the system, not everyone shares the culture and objectives of the dean which is a fact of life and hard to change, the deans job is to tilt the culture, faculties can have several cultures.

-We think of research opportunities and teaching load, some faculties denigrate teaching - it is not considered important for promotion - only research is important, people see it as counter-productive to work at teaching, there is resistance to innovation that challenges beliefs, not everyone in society is convinced a general liberal education is valuable, teaching and research is not a primary focus, the focus is on program administration.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.5 (Continued)

Culture

-the research culture is highly innovative and has a positive impact on quality, a culture committed to high quality, a culture directed towards practice rather than theoretical work, top ranking universities have a culture, mythical or real and it provides a history, tradition, ethos and a sense of participating and belonging, some staff value research, a culture of close working relationships with industry, a scholarly research culture is important, there is a culture of a star system, where researchers with lots of dollars work in isolation, the culture is a service culture committed to students and the development of practitioners in the field of study, you get no rewards for teaching, so only a minimum of effort is put in, people see it as counter-productive to work at teaching.

-There is a division of cultures between those who want to work hard at teaching and research versus those who have family priorities and believe this is their most important priority.

-in professional faculties, there is a division of cultures. Those whose orientation is scholarly and those whose orientation is to the profession. This can lead to an unwillingness to set unit priorities, you must allow creative people to have freedom, professors are symbolic role models who model professional behaviours and develop practitioners in the field of study, students acquire certain beliefs about the profession, the culture is one where we have to be the very best, a conservative culture affects the ability to alter teaching methods in a way more consistent with our times, some faculty owe their primary loyalty to the national and international discipline and are less concerned about quality in teaching, a culture promoting accessibility, publishing is valued more highly in some areas than others, - need a collegial environment, there has to be collective values for quality, rather than leadership.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.5 (Continued)

Culture

-People want some assurance in their own minds that evaluation is fair and supplied equitably, need a true accountability measure to the clients of the university, the students; we should leave it to the particular discipline to adjudicate what is quality, you hate to have too much hanging on evaluation systems for ranking professors, quality has to be monitored at the lowest level, if there are good selection criteria for hiring then every staff member hired should be of high quality, centralization - decentralization can have an impact on quality and needs monitoring, we must be honest with our peers about their performance, the culture and several subcultures of the faculty awakens people to the fact that there are different ways to do things, most things happen because there is some agreement that they should happen, if you have a large consensus on values and norms you need few rules, as everyone has internalized them, when this is not the case, you have to write them down, the faculty is a community, the collective decision making culture, professors model their discipline and show enthusiasm, the collegial will to work hard, many professors are members of professional organizations and must meet requirements for ethics and honour, different disciplines have different criteria and understanding on what constitutes research quality, we try to be responsive to needs, an attitude of continuous improvement is important.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

5.3.6 Organizational Politics

While politics are not always a negative factor for quality, they are often perceived to be negative through the perceptions people have of the actions of others. Universities try to reduce this as a factor and improve the quality climate by moving to an open and participatory style of decision-making.

Politics are not inherently bad in and of themselves, but are normally associated with power. How this power is exercised by the administrative areas and deans can have a profound influence on faculties. There is an attempt in many areas to reduce the influence of politics by having committees exercise some of this power to allow for a more open and collective decision-making style. If there is a consensus on the importance of quality in the faculty, there is less need for a rigidly structured quality plan. Unfortunately, units are often in a survival mode, competing with each other to maintain their own personal integrity which creates problems and reduces efficiency.

Some of the affects of organizational politics on climate are outlined in Table 5.3.6.

Table 5.3.6

Organizational Politics

- politics are not necessarily negative, they are associated with power, which may interfere with quality.
- there needs to be an acceptance or understanding that all programs are relevant.
- if administrative roles start taking a precedence over the mission of the university, that is destructive. We waste effort on administrative issues, rather than the actual mission, there is a general suspicion of the quality of performance appraisals and that they could be used arbitrarily or ruthlessly.
- you need to work in a collegial manner, as allies, and the presentation of self is critical in the political game, a problem is that the university does not have a political constituency to lobby for it.
- participatory decision-making is a standard way of doing things, leading to mutually agreed to decisions, an open and collective style, decisions are now made largely by committee, things are rigidly structured in terms of different committees which provide advice, while the use of committees does not eliminate politics, it reduces their impact.
- the university has the freedom to make decisions, but there is a great deal of politics involved. People are often afraid to make these decisions, often this issue comes back to personalities and personal style.
- there is politics about the way faculties feel they are treated by central administration.
- politics are the notions one faculty has about another, such as a professional degree is not as good or academic as others, petty jealousies always get in the way, small "p" political factors do not produce what is needed, politics hinder quality when everyone is looking out for their own interests.
- heads of departments are territorial and protect their turf.
- There are redundancies across the campus, but politics prevents us from addressing these.
- there is tremendous politicking over declining resources.
- units get into a survival modes these days, competing with each other.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

Table 5.3.6 (Continued)

Organizational Politics

-there are politics at higher levels, in budgeting, there are politics involved in collective agreements, there is a lack of reasonableness and collegiality, sometimes politics provide an opportunity to enhance quality, but in other ways they cause inter-jurisdictional difficulties, institutional politics are not necessarily undesirable, it involves the exercise of power and people who have this power do not always exercise it in a selfless way.

-if people are given the opportunity to say their piece, they feel they have contributed and respect the decision, in larger groups, there is less allowance for organizational politics, it becomes the tyranny of the majority.

-not like a political party where there is a goal, people just do it for personal reasons.

-departments are fragmented, there are often many different power groups and personalities.

-politics are often seen in petty stuff and internal bickering between groups.

-the university has the freedom to make decisions, with a great deal of politics involved in each decision, but people are afraid to make decisions. The university is very political, politics lead to a lack of trust, this has negative impact on mission.

-if groups are fractionalized, they compete for resources, if people are fractionalized and competitive for resources, that is not helpful, the union is always confrontational and this flies in the face of collegiality.

-politics are part of the culture, organizational politics affects quality when people act detrimentally.

Note: Selected positive and negative elements cited in interviews as critical to a quality climate

5.3.7 Conclusions

These six factors help to define several important elements of a quality climate emerging from this research. This research has not been able to clearly delineate the magnitude of importance of each factor to a quality climate and in what order of precedence, other than to identify the existence of both positive and negative elements pertaining to each. While each element is important to quality, it may differ in its weight and significance from faculty to faculty, unit to unit, person to person and situation to situation. Further research is needed to define in more detail the relative importance of each of these quality climate elements and to specify the conditions where this influence may or may not hold. The next section will investigate in more detail the relative importance of these factors.

5.3.8 The Influence of Climate Factors

The interviews held with key informants in the university have identified some critical areas where climate may play an important role in quality. The importance of each of the six climate factors has been identified by going through the statements made about each climate factor, and coding them as to whether they pertain to positive or negative statements about the influence of climate on quality. For example, a positive statement that smaller faculties have comradeship creating a positive climate for quality or a statement about how administrative duties take time away from teaching,

research and service is seen as negative for quality. Using this information, it is then possible to count the number of positive or negative comments as a rough measure of the impacts of each climate factor on quality. The results are presented in Table 5.4.

This table presents findings on the importance of these factors as measured by the number of statements found in the interview transcripts. Cited most often as a positive factor towards creating a quality climate is the faculty culture followed in turn by the structure of the faculty or university, type of faculty and administrative factors. Mission and goals and organizational politics were cited less often. Given that the responses might represent in some way, the views of the majority of faculty members and administrators, this suggests that the faculty culture and organizational structure of the university are perhaps of greater importance in creating a positive quality climate.

Negative statements were made about the impact of some of these factors on the climate for quality. Mentioned most often as negative were administrative and organizational politics and culture. More interviews mentioned organizational politics as being a negative factor than a positive factor. Equal numbers of responses cited administrative factors as having a negative impact as having a positive impact on quality.

In terms of overall importance of climate factors, mentioned most frequently were administrative factors followed by culture and type of faculty. This ordering of

importance provides some direction on where to focus attention to begin developing a climate conducive for quality.

The next section will discuss a strategic quality model derived from the information gathered in this research. It is proposed that this model might be useful to direct quality improvement activities.

Table 5.4
Statements Pertaining to Climate Factors

Factor	Positive Statements (number)	Negative Statements (number)	Total Statements (number)
Mission and Goals	16	11	27
Structure	53	1	54
Type of Faculty	48	10	58
Administrative	38	38	76
Culture	55	20	75
Organizational Politics	13	24	37

Source: Data excerpted from interview transcripts

5.4 A Model for Quality Improvement

The process of improving quality in a university and its faculties is complex.

Interviews have suggested that each faculty and the administrative unit have put into place a variety of structures and processes to improve quality. All of the activities to improve teaching, research and service mentioned previously are part of either a self-organizing system of quality improvement which works with little direct intervention or one which is administered by some level of the university. The elements cited as important to quality in interviews interact with each other to improve or inhibit the overall level of quality. These have led to the development of a model of quality improvement activities depicted in Figure 5.1.

The model consists of five elements: (1) the six quality climate factors, (2) a quality improvement strategy both explicit and implicit, (3) the various improvement activities being undertaken to improve the quality of teaching, research and service, (4) measurements undertaken to assess quality performance, (5) administrative actions using these performance measures and other information to regularly adjust the quality strategy where appropriate.

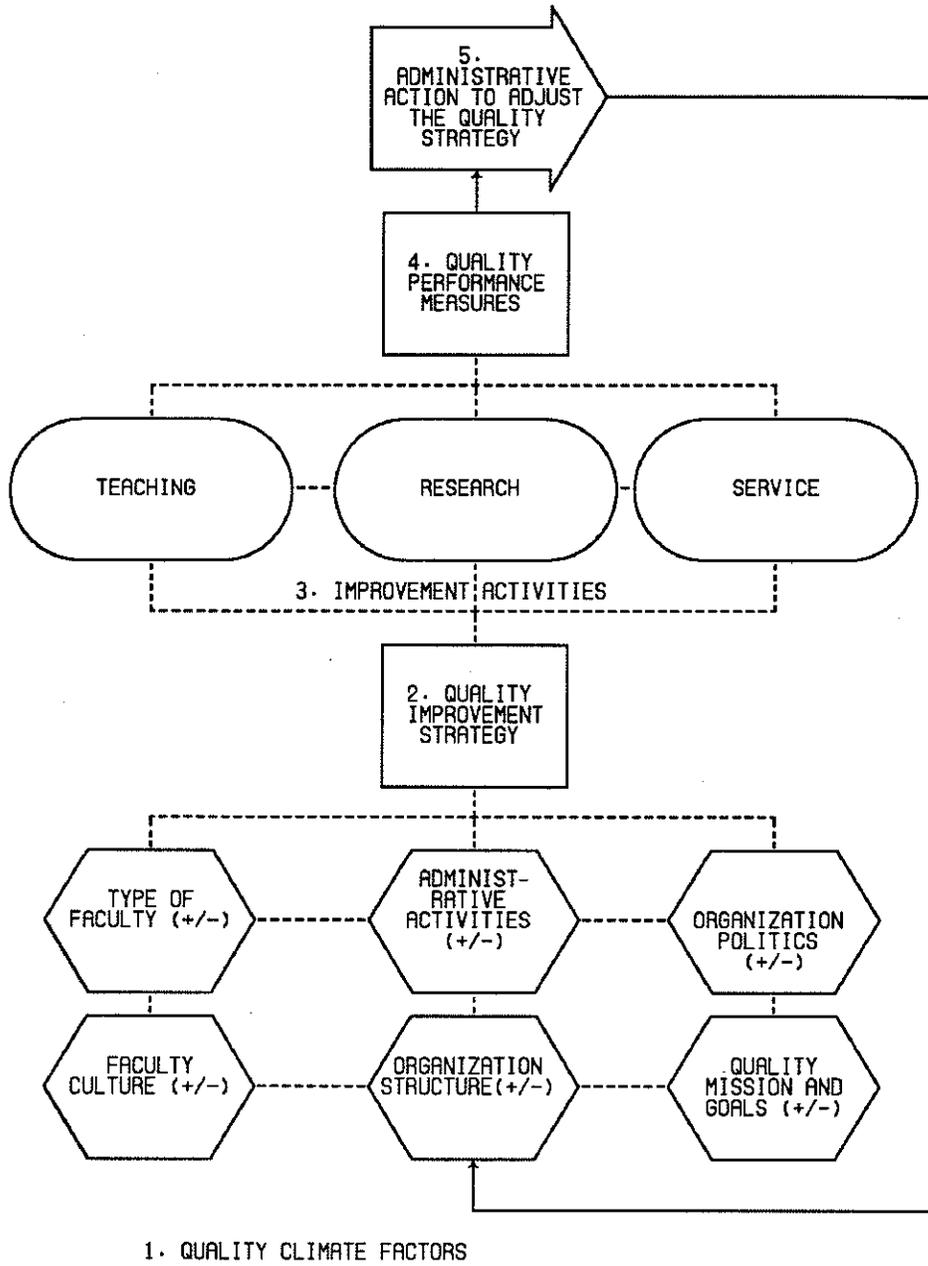


FIGURE 5.1: QUALITY PROCESS MODEL

The model components are:

1. **Quality Climate Factors** (as per Figure 5.1, page 227)

This study is explanatory in nature and has taken some first steps towards the discovery of what is important to the improvement of quality in a university setting. These findings about the importance of a climate for quality have emerged naturally from the evidence gathered in interviews. This concept of climate seems to present a credible explanation of how quality may function in a university setting. This theory of a climate for quality is grounded in the data and has been created from the patterns which emerged naturally. This theory was developed from comparisons between different types of faculties and administrative units, and between persons at various levels of responsibility from vice-presidents and administrators to deans, department heads, professors and finally the students' union.

The findings have been triangulated by including a wide variety of perspectives in different faculties and at different levels to search broadly for evidence to support the importance of these factors. In any research study there never seems to be enough time nor funding available to investigate a topic as fully as one might wish. Some work must be left for future researchers!

This concept of a climate for quality represents those things found to be important in the research; that some faculties or programs are higher in quality or better in some ways than others, and their quality can be attributed to the presence or absence of climate factors. The interactions which may take place among these climate factors will affect quality.

To make a difference to quality, university administrators must effect positive changes in these six factors. What is unclear at present is the ability of administrators to control and manage these factors. This research has indicated that while serious concerns exist about quality, there is uncertainty about how to effect meaningful improvement in quality due to the complexity of these relationships. What is interesting is that these climate factors may have both positive or negative aspects which can impact quality. Quality can be improved by accentuating and supporting those climate factors which positively impact on quality, or by eliminating the more negative aspects of these factors.

This research has built up a theory of a climate for quality composed of six factors having an important influence on quality. There is a strong indication from this research that quality is linked to the ability of deans, administrators and individuals to manage these factors. While the theory of a quality climate is grounded in the responses gathered from interviews, success in improving quality and in making a positive difference is tied to the ability of administrators to

effect change. Effecting change may be difficult as the six factors are interconnected; a change in one affects the other. It is not clear that it is easy to improve quality. Some faculties and their administrators are better at it than others.

Central administrative units and deans may only be able to manage some of these factors in an indirect manner. Some climate factors may have a direct influence on quality, while for others the quality influence may be more indirect. Many of these factors may act in combination with each other. For example, certain organizational structures which positively impact quality may be resident in certain types of faculties, or in other situations administrative rules and policies may be linked to a specific type of organizational structure.

These factors may vary in their influence and weight across faculties. It is important to note that other universities may do things differently with respect to quality or may have other climate factors which are important. If other universities operate like this one, however, then these climate factors may be transferable to these settings. When reviewing this research, consideration should be given to whether these findings may be transferable elsewhere.

This research has not been able to assess the magnitude of influence of these factors, although culture and administrative factors seem to be of greatest

importance, as measured by the large number of times they are referred to in interviews as having an influence.

Concern was expressed that effecting change was a long and slow process, especially in faculties where staff may be firmly set in their ways and resistant to change. Faculties may contain multiple cultures making it difficult to make a change, such as cultures that are not supportive to teaching, research or service. These make the improvement of quality problematic. Culture seems to be linked closely to each of the other climate factors. A strong and positive culture may be able to overcome many of the things which create a negative quality climate.

There were six climate factors cited during interviews as having an important influence on quality. These factors have been discussed in detail and include the presence of quality as part of the mission and goals statement, organizational structure, type of faculty (professional or general or administrative unit), faculty culture, organization politics and administrative processes.

Climate factors are important elements in a strategy for quality. They must be reflected in the administration's operational plan for quality improvement.

Universities need to understand how these climate factors affect the explicit or implicit strategies of faculties to improve quality.

Administrators seem to have an important role to play in quality as they take action to remove or reduce the effects of negative climate factors which can create barriers to quality improvement. Administrators may pay particular attention to those aspects of the six climate factors found to positively impact on quality. Administrators most important function may be to reduce or eliminate the roadblocks to quality improvement in teaching, research and service created by these climate factors.

2. **Quality Improvement Strategy** (as per Figure 5.1, page 227)

The quality improvement strategy is developed from actions taken on these climate factors to accentuate positive or remove negative barriers to teaching, research and service. The strategy may include quality improvement activities which are explicit or implicit in nature. These can range from explicit activities such as working to improve the quality of research by establishing a research institute to assist in playing a direct role in improving faculty research or implicit strategies which act through the development of a teaching responsibilities policy to broadly direct the actions of faculty members.

One of the interesting findings obtained from this qualitative study pertains to the types of improvement activities undertaken. While there was considerable agreement and similarity amongst those interviewed in professional, general and administrative units on how to define teaching, research and service quality and

on the importance of other climate factors, there were widely divergent variations in the types of activities being used to improve quality throughout the university. This highlights the effects of local climate factors on improvement activities and suggests the necessity for faculties to take action in a manner appropriate to their particular situation, rather than following rigid inflexible strategies.

Some of the types of actions being taken to improve teaching quality include working towards the accomplishment of the mission, working to build an excellent reputation and providing a good learning environment for students. Quality in teaching is aided by ensuring that professors are up-to-date and relevant in their course material and that curriculum material is transmitted to students in the most effective way possible. Quality also means ensuring that the training provided is useful, provides value and results in positive outcomes for students.

Quality in research seemed to be of less concern in many faculties, due to the built in self-organizing processes such as peer review to guarantee a level of quality to managerial interventions by providing seed money or release time to build up research programs, or by working to have researchers in a faculty work together to have their programs of research dovetail with each other.

With respect to service, there was general belief that while you may be able to affect service quality by having only those good at service participate, service is just something which you should do.

3. **Improvement Activities** (as per Figure 5.1, page 227)

Faculties seem to work to ensure that the quality of their services is as high as possible. They select improvement activities which seem most appropriate for their particular situation. The interview data suggests that teaching quality is very important and may be defined in a variety of manners. A review of the comments on teaching quality suggests that selected factors relating to the teaching process itself, personal characteristics and skills of professors and the achievement of outcomes are central to the definition of quality in teaching. As Astin (1993) suggests, teaching is done in private with no direct observation as opposed to research which is more public and able to be directly assessed. This can be a problem for assessing teaching quality.

Ewell (1985) comments on the importance of assessment in improving teaching and learning. While there are measurement systems for assessing the quality of student performance, there was some concern expressed over the lack of appropriate systems to assess the teaching performance of professors. If objective measures are not readily available to assess faculty quality, this may indicate why teaching is not always considered as an important factor for tenure

and promotion purposes. Bateman and Roberts (1992) indicate that course evaluations are best used for improving teaching effectiveness. There are, however, some reservations on using the data from student evaluations to assess professor performance (Baum and Brown, 1980).

There was a "reinforcing cycle" (Senge, 1990) for teaching identified during the interviews whereby new professors may be permitted some release time to concentrate more effort on establishing their teaching programs. This free time allows new teachers to spend extra time preparing lessons and results in higher quality teaching. The positive feedback from this stimulates the professor to greater effort and higher quality in teaching. Their improvement in teaching performance can then be compared to other new faculty members who are not permitted a similar amount of release time to develop teaching skills early in their careers. There was concern expressed however, that the reinforcing cycle is often in a negative direction, with new professors having to take heavier teaching loads, giving them inadequate time to establish a research program or to develop quality teaching materials.

Many of those interviewed expressed the belief that what is critical to success in research is becoming part of an on-going research and publication cycle over your academic career. Professors who establish a solid research program early in their careers are able to use this success to gain tenure. By concentrating on

research, it was suggested that they would further their academic career to a greater extent than is possible through successful teaching. For example, establishing a successful program of research is essential to the development of quality research papers for publication in prestigious peer reviewed journals. Having a good publication record will support the acquisition of new research grants to repeat this cycle for the duration of the faculty members's academic career. Boyer (1990) expresses a concern that pressures to publish reduce the quality of teaching, and that publications should not be the primary criteria for promotion.

This could be termed a "reinforcing cycle" (Senge, 1990) whereby more effort on research leads to substantial rewards and increased effort. This cycle may also go the other way whereby a lack of success leads to fewer rewards and research grants, in turn leading to less publishing and a reduction in effort. Luck may indeed play a part in the successful development of the career of a professor!

Those interviewed did not always emphasize the importance of service as a priority endeavour to the same level as teaching and research. Certain skills were suggested as being important to quality in service activities. Service is seen as providing an important benefit to the university. Service is perceived as being of more value by professional than general faculties. At the same time, a

barrier to a quality service climate can be created by negative perceptions of its worth.

There is a "reinforcing cycle" for service (Senge, 1990) which suggests that those who are good at it and do a lot of service work are often continually asked to do more and more, whether it entails sitting on committees or some kind of work external to the university. Those not good at it end up doing less and less service work.

These reinforcing cycles act as self organizing systems whereby success in a particular area can lead to greater success and improved quality. A very important research outcome is to identify the proper arrangements of climate factors to create feedback loops to positively impact on quality. Improvement activities have been found to work in reducing or eliminating negative climate factors and supporting positive factors. The strategies selected to make improvements in quality must be appropriate to the climate factors found to be important in each faculty situation. Deans and other administrators must come to understand how they can control and manage their particular set of climate factors.

4. **Quality Performance Measures** (as per Figure 5.1, page 227)

There is some agreement that the outputs of teaching, research and service are often difficult to measure. As suggested in one interview, the "idiosyncratic nature" of teaching results in a situation where standardized measures relating to the teaching process may not be feasible or practicable. While research is more public, teaching is a private activity and difficult to assess. Concerns were expressed as to whether any credible and valid evaluation system can be designed for assessing teaching performance.

There are many ways in which faculty members undertake their research, whether through laboratory research, field research of different types, or theoretical research. Since research can be conducted in different ways, we need to take a multiple perspectives approach to quality measurement. The peer review process for research grants and publications is one indicator of quality, but is not the sole determining factor. Excellent research proposals often go unfunded due to a lack of sufficient research funds. As well, quality research papers may go unpublished due to a lack of space in refereed journals.

Service is best measured by those that receive it; the observers or consumers of the service activity. The measures used to assess quality of service are hampered by the enormous variation in service activities throughout universities,

the lack of importance accorded service and a lack of emphasis on service as a critical activity.

While it may be easy to identify bad or superlative teaching, research and service, it is not always as easy to identify that which is not so bad, adequate or just good. It was suggested that the top and bottom 5% of performances are the easiest to measure. More rigid guidelines seem to exist to define research quality than quality in teaching or service activities. While professional faculties have accreditation systems, general faculties do not have these same types of regular quality assessment systems.

The value of a general faculty was cited as being more difficult to measure than the value of a professional faculty which has a constituency or jury constantly assessing its actions. The measures of quality appropriate to professional faculties were different from those for general faculties. All measures must be fair and honest and cannot be used arbitrarily or ruthlessly against the faculty or its members. There was some suspicion over how information collected from these measures may be used. This thinking acts as a barrier to measurement and creates a climate resistant to change. Without some measurability, however subjective, the stimulus to act to improve quality may never arise!

5. **Administrative Activities to Adjust the Quality Strategy** (as per Figure 5.1, page 227)

Information collected on performance can be used to adjust, within limits, the quality climate factors to ensure that a high quality of teaching, research and service is being delivered to university clients. Action can be taken to reduce the impact of negative climate factors or accentuate positive climate factors. This completes the loop of cause-effect in Figure 5.1. This type of continuous feedback on quality shows how the constant adjustment of climate factors ensures that continuous improvements take place in the quality of teaching, research and service. These adjustments may not be continuous, but may only occur when there is a large perceived discrepancy between measured levels of quality and aspirations so that action must be taken. Alternatively, in some faculties, the adjustments may be made continuously but only for the research process. It would seem desirable to have continuous quality improvements taking place over all of the teaching, research and service processes simultaneously.

Chapter 6 will discuss some future research opportunities in the area of quality in a university.

6.0 CONCLUSIONS

6.1 Introduction

In this dissertation the traditional quality thinking taken from the business quality literature has been reviewed. Ideas extracted from this literature were used to structure thinking about quality in a university setting. Concepts from the educational research literature on quality were used to assist in preparing a series of research questions. Data on quality were collected through face-to-face interviews with senior administrators and selected faculty members. These interviews identified a number of significant factors pertaining to quality and the viability of using total quality management techniques from the world of business.

This study has investigated the processes by which universities go about managing their quality control and improvement processes. It has identified a number of factors critical to the creation of a quality climate in academic units. The diversity inherent in universities can make it difficult to use quality improvement systems which are rigid and structured. Rigid quality systems do not work well in a university. Universities are comprised of a loose aggregation of faculties that possess a high degree of delegated authority. Universities appear to operate using a bottom up as much as a top down organizational structure, with a great deal of freedom for independent action

accorded to those who are involved in the three main processes of teaching, research and service.

Six factors have been suggested as important to a quality climate: (1) the faculty culture which has proved an important component of a climate for improving quality. Cultures have been found to be both supportive of quality, and to act as a barrier to quality by making it difficult to make improvements; (2) the type of faculty has been cited as important to a quality climate. Whether a faculty is large or small, or whether it is professional or general in nature have all proved to be significant factors in directing activities for quality; (3) the organizational structure of the university and faculties can be supportive of quality or may create roadblocks for quality; (4) organizational politics which while not negative in themselves, may be used in a negative fashion and can create a negative climate; and (5) mission and goals statements which need to set out clear priorities for quality and (6) administrative processes which create positive frameworks for quality in teaching, research and service but at the same time can create administrative barriers for quality through their rules and paperwork.

These climate factors were mentioned as very important in creating either a positive or negative climate for quality or having a mixed influence where there may be positive or negative elements. Management of these factors is critical for any quality improvement strategy.

The next section will explore the viability of total quality management (TQM) techniques as outlined in Chapter 2 to improve quality in a university.

6.2 Total Quality Management in a University Setting

Based on evidence arising from this research and within the limitations of this study, it would seem that it is not possible to measure quality in a definitive manner, especially for teaching. The measurement of quality would seem to be a very elusive thing. Everyone in a university may have their own understanding of what quality means, which is linked closely to a particular place and time and emanates to a large extent from the particular faculty culture.

The quality literature suggests that the total quality management (TQM) concepts of Deming (1986), Juran (1988) and others are transferable to service industries, such as universities. Deming's (1986) fourteen points are fundamental to TQM. Universities are only partially able to meet some of these TQM criteria while they may not be able to meet the requirements of others:

1. **Constancy of Purpose**

TQM methods, if they are to be applied properly, require a constancy of purpose or vision. Creating a single vision and mission which can be applied in a consistent manner throughout the university or in individual faculties may be a

difficult if not impossible task, given the way universities currently operate. University professors are delegated a great deal of freedom in their teaching, research, and service work. They act as independent entrepreneurs, obtaining research grants and conducting their teaching, research and service activities within the parameters of academic freedom. Getting everyone to agree to a single common vision may not be possible. The highly unstructured nature of university operations makes it difficult to apply any rigid and rule based philosophy of operation. Universities may require multiple vision statements considering the broad set of stakeholder groups which they serve.

2. **New Philosophy**

Another important TQM area suggested by the research is the need to adopt a new philosophy, such as meeting customer or in this case student or employer expectations, whatever that may mean. University professors operate with almost total freedom to use whatever methods they see fit to conduct their teaching and research within a set of broad curriculum or policy guidelines. Students are usually not viewed as customers of a university, with needs that must be met. During this research, there was mention in the interviews that this way of thinking needed to be changed. However it will require a significant change in outlook for universities to begin to view their students and employers as customers of the teaching process, or to view government research granting agencies as customers of the research process. When government provides

research funding, it usually wants the emphasis slanted towards applied rather than basic research, which is not always the preferred research direction of university researchers. Universities may be slow to adapt new philosophies which clash with the traditional tenets of academic freedom and purpose, especially when they may be seen to conflict with the academic culture.

3. **Inspection**

TQM techniques suggest a need to move away from the concepts of mass production to one of process improvement. The teaching process, especially in undergraduate areas, is tilted towards the philosophy of imparting a certain amount of basic knowledge, after which testing is used to assess success. This is not congruent with the Deming (1986) philosophy.

Inspection requires standardized criteria against which to measure the output from an activity. Devising such standards may not be possible in an academic setting because each professor may have his/her own personal standards and may use his/her own favourite methods for the delivery of teaching, research and service activities.

4. **Single Supplier**

There was no mention during the interviews of this as being an issue or concern of administrators or faculty members.

5. **Improve Systems Constantly**

Commitment to long term improvement activities is a fundamental principle of TQM. In a university setting, senior managers such as presidents, vice-presidents and deans are normally appointed to a fixed but renewable term, often five years. This can create a barrier for the implementation of major changes since a single period of five years may provide insufficient amount of time to make important changes.

Faculties need to develop positive feedback structures (Senge, 1990) to support improvement in teaching, research and service, whereby successful improvements incrementally build in a progressive fashion to greater improvement. The research has suggested areas where this type of improvement can take place.

6. **Training**

Training is a key ingredient of any TQM program. Research has suggested that an important area is the provision of opportunities for professors to improve their teaching skills. This university is presently initiating a number of activities to improve the teaching and research skills of professors. This type of activity includes training to improve the processes of teaching and research as well as more indirect methods to improve quality such as the use of mentoring programs.

7. Improve Leadership

Leadership for quality is essential to TQM. The organizational structure of a university can make this a difficult task. Universities operate in a collegial fashion with shared decision-making. The complexity of interdisciplinary and multidisciplinary activities can provide difficulties for leadership to occur. The manner in which universities are organized and structured may be an inhibiting factor to TQM implementation. Alternatively, a special kind of leader is required with the skills necessary to gain a consensus on a vision or mission and to develop a common understanding of what quality is and how improvements may be made through the climate variables mentioned above.

8. Drive Out Fear

Faculty members must be free to undertake teaching, research and service in those areas where they feel most comfortable. They must also feel free to experiment and try new things. To overcome resistance to change, fear of negative consequences on individuals and groups must be reduced. This requires leadership!

9. Break Down Barriers Between Departments

TQM states that there is a need to break down barriers between departments and faculties. This research has found many barriers as cited in the attitudes held by general faculties about professional faculties or those which one faculty member

holds about another, or the feelings that may exist about other units which are thought to not belong in a university setting, or as taking funds away from what may be considered more important faculties or units. Service teaching policies may be intended to break down some of these barriers, but are often seen as lowering the level of quality.

10. Eliminate Slogans

This point was not mentioned as a concern or priority during interviews.

11. Eliminate Numerical Goals and Quotas

There were concerns voiced that counting publications, using numerical values for student ratings of professors and counting the total dollars provided in research grants are not enough. This approach to measurement has the effect of driving faculty members to meet minimum criteria, to the detriment of the pursuit of long-term quality improvements!

12. Remove Barriers to Pride of Workmanship

Many subjects cited concerns over the use of poorly designed and unreliable performance appraisal systems. There seems to be a need for a fair and honest system of appraisal which is acceptable to everyone and which measures those things appropriate to quality performance in a university. Excellence, wherever it is found, should be recognized.

13. Institute a Program of Education and Self-Improvement

In universities, professors are involved in on-going scholarship and learning as they undertake their teaching, research and service. If these things are occurring routinely in a university setting, then quality should occur by the very nature of these activities. As these occur, they can create positive feedback loops which support and build on the existing quality.

14. Involve everyone in the transformation

Quality is a critical function and needs the participation of everyone in a university to be successful. This research has demonstrated that everyone has some role to play in quality improvement. Each level of the university has its own particular responsibilities and actions for quality which must be clearly delineated. Barriers must be removed so that everyone can participate in the improvement. A democratic style of management should facilitate this, but will require leadership to focus the effort.

Universities are seen to be adhering to many of the basic principles of TQM.

Satisfying others may be problematic. TQM methods seem to fit into many of the existing organizational structures and processes of a university and may provide a useful guideline for structuring activities to improve quality. More research is required into how this might occur. Total quality management techniques have to be

centred on improving the processes of teaching, research and service for them to have a real impact on quality in a university setting.

Conclusions drawn from this discussion concerning the appropriateness of applying TQM methods to a university setting are:

1. At the present time, total quality management is not applicable in its entirety to a university setting. There are many areas where universities are able to meet Deming's 14 points, and these points provide directions and a framework to direct future activities. Universities need to develop their own special systems for quality improvement, however which are appropriate to their own situation and setting.
2. Universities are organizations where faculty members have the freedom to demonstrate their scholarship and creativity in a wide variety of ways. It is impossible to mandate how faculty members should operate in every aspect of their work.
3. In order for TQM to work in a university setting, the emphasis must shift to influencing the climate factors of mission, culture, type of faculty, organizational politics, administrative procedures and organizational structures and eliminate those things which create barriers to quality. This may prove difficult to do in the short run.

4. TQM techniques concentrate on improving the processes such of teaching, research and service and may seek to standardize them by creating routine and regular ways of doing things. University professors prize their academic freedom and individuality, and would fight against attempts to develop routine and standard ways of doing things. Standardization of processes may destroy unique elements and the creativity of a university. TQM holds many dangers for universities if it is used in an abusive and controlling manner. Universities operate with large amounts of delegated authority. Hierarchical management control systems are inappropriate in a university where too much control can destroy creativity.

5. The extent to which it is possible to change faculty members through training is uncertain. It may be possible to reorganize faculties or programs by grouping by similar functions to allow TQM to be applied to these more homogeneous units; such as grouping common first year courses into one unit. It may not be possible or desirable to change the governance structure of universities which provide the delegated authority that faculties now enjoy.

6. TQM may be appropriate for some areas of a university. There was some suggestion that TQM may work in administrative areas where tasks are routine. It may also be successful in some professional faculties where there exist

narrower purposes, that of educating people to practice in a well established profession.

7. TQM methods require a high level of teamwork and cooperation between units to be successful. If faculty members or units do not want to work cooperatively with each other or the central administrative unit, then it will be difficult to use TQM methods. This problem must be dealt with first!

8. If TQM methods are to be successful, they must be able to accommodate the types of organizational structures and processes peculiar to this type of organization and be adaptive to various climate factors. TQM methods make an assumption that it is possible to come to some common agreement on the goals and objectives of the organization and that it is possible to measure objectively the inputs and outputs of processes. There was some disagreement about whether quality in teaching can be measured.

In summary, while the basic principles of total quality management may be important for universities, TQM methods may not be sufficiently flexible in their present state to work in such a fragmented and diffuse organization as a university, other than in the standardized operations of administrative units. What is clear from the research is that quality is an important concern of universities. Whether they use TQM methods or

some other quality method to direct their quality improvement activities is not that important in a university, what is important is that quality is a very important matter.

6.3 Quality Improvement and the Learning Organization

The concepts of Peter Senge (1990) about the learning organization may be applicable to quality improvement in universities. These concepts address ways to overcome institutional barriers and recognize opportunities to improve quality. If universities were to apply the principles of the learning organization, they may be able to improve their quality. Senge (1990) has identified three critical areas of importance in the learning organization: 1) the need for a shared vision; 2) the value of true dialogue; and 3) commonly developed conceptualizations. The concepts of the learning organization to suggest how they might be applied to a university in the following.

1. Shared Vision

A shared vision provides a focus to direct energy for quality improvement.

Having a vision for quality is important to assist the learning which needs to take place to improve quality. Visions also provide a longer term perspective to quality. Universities can be viewed as being comprised of a group of independent entrepreneurs, each with their own goals and particular outlook.

The problem is to find a commonality of values.

This research has demonstrated the importance of faculty culture in shaping what people think about quality and in assisting in directing their actions. Deans and other senior administrators have a responsibility to provide leadership and a clear vision of what is important. To do this effectively, they need to understand their faculty or unit cultures. Faculty cultures can result in groups of people where some groups believe that research is important while others may think that teaching is the most important priority. It may be counterproductive to attempt to empower people for quality improvement when the organization is unaligned. Attempting to improve quality in this type of situation can create stress on the organization. The role of senior administrators is to create a process for the development of a commonly shared vision.

2. Dialogues

Dialogues need to take place to create shared mental models to allow the university's members come to understand and learn about the reality of the situation more clearly. The collegial system in a university provides an opportunity for thoughtful discussion of current realities and a sharing of these models. Universities have an extensive use of committees where everyone can meet as colleagues, in a non-threatening atmosphere. This can provide an opportunity to develop a deeper insight into what is happening with respect to quality and why. Faculty members may require some training in conducting dialogues without agendas to assist these groups in exploring quality.

Deans and senior administrators need to understand divergent thinking which may exist in their faculty. This thinking may be deeply imbedded in the faculty culture. Greater use needs to be made of group meetings to provide opportunities for sharing of information and understanding the realities which exist in faculties which may impede learning about how to effect improvements. According to Senge, dialogues allow everyone to understand the views of stakeholders about quality and provide an opportunity to develop shared mental models.

3. Conceptualization

Improving quality in a university requires that there be an understanding of the leverage points where pressure may be applied to make teaching, research and service better. Many faculties have given quality a great deal of thought as evidenced by the many activities now being used to improve teaching, research and service. Conceptualization consists of understanding these relationships and building new mental models from the knowledge gained through dialogues and conversations with faculty members. There is a need to take a longer term perspective which is grounded in the realities of a particular faculty situation. The university needs to be seen as an interconnected whole, rather than as a smaller group of competing parts. This understanding about how a complex system such as a university works is important to assist with learning and action.

Administrators can work to discover how the systems of teaching, research and service can be made to work better by identifying the critical leverage points needed to move the university in the direction of improved quality performance. This is not a short term process, but requires a longer term perspective to allow time for the appropriate discussions to take place and a shared vision to be developed. It may mean that quality improvement cannot take place rapidly, but requires perseverance over the longer term as the concepts of the learning organization are slowly applied to direct actions for improved quality performance.

6.4 Future Research Opportunities

This qualitative study raises a number of research questions for future study. Some directions for future research into quality in a university setting are explored below.

1. **Measures of Teaching Quality**

At the present time, there seems to be few comprehensive measures of teaching quality. Most measures of teaching quality are indirect in nature. There needs to be more research conducted to identify what methods are appropriate to measure the quality of university teaching.

2 **High quality versus low quality universities and faculties**

Increasing in popularity are studies to rank the quality of faculties (e.g., Canadian Business annual ranking of business schools) or universities (e.g., Macleans). Research is needed into how these so called "high quality" faculties or universities differ from ones which are believed to be "lower" in quality so that we can learn from these situations and identify areas for real quality improvement.

3. **Professional Versus General Faculties**

Professional faculties have a different mandate than general faculties, because they are also responsible for training practitioners who will go on to practice in a particular field. Research is needed to identify how these differences may impact quality improvement.

4. **Large Versus Small Faculties**

The problems and quality issues facing a large faculty are different from those facing smaller ones. Research is necessary to clarify the effect and magnitude of these differences.

5. **Resource Levels**

While no faculty or department ever believes that it has sufficient resources, what level is adequate? What is an appropriate allocation of resources to create quality in a faculty or department?

6. **Accreditation**

What effect does accreditation have on quality in a faculty? Does accreditation make any difference? Are the outcomes of students from a professionally accredited faculty better or worse than students from a faculty that does not go through a regular accreditation program?

7. **Roles**

What roles are taken by administrators, deans and faculty members and what changes should be made to improve the effectiveness of their roles to assist with quality improvement?

8. **Climate**

Climate factors have been shown to be important to quality. Research is required into the importance of the role played by each quality factor and whether this importance may vary in different universities and faculties.

9. TQM Methods

More research is needed into the application of TQM methods to a university setting. Replicating this study in other settings will aid in finding out if the model and the climate factors can be applied more generally.

10. The Learning Organization

The concepts of Peter Senge (1990) would seem to hold promise for the improvement of quality in universities. There would seem to be a need for these concepts to be applied and tested and their results measured.

These are some suggestions of potential areas into which future research on quality could usefully be conducted.

6.5 Conclusions

The results of this research are based on a qualitative study and require caution when generalized to a wider population of universities. The findings of this study may be applicable to other situations, but this can only be determined through further research. Within this limitation, this research has identified a number of important quality issues.

The results of this study have suggested that total quality management methods as defined in the business literature are not entirely appropriate to address quality in a complex and diverse service organization such as a university. What is needed is a different way of addressing quality which concentrates on creating a climate conducive to quality improvement.

The research has put forward for consideration a quality model in Figure 5.1 to assist in structuring thinking about quality. Such models assist in organizing thinking and directing action. This model was developed from the research in a systematic manner.

The research also identified six quality climate factors important to university quality. More research is needed to define the conditions under which these factors may positively affect quality and to identify how the model may be used to direct quality improvement activities.

This study has identified that for the most part, universities have widely accepted mechanisms in place to measure the quality of research. These largely emanate from the public nature of research where the results are reviewed by peers. For teaching, there was concern about the adequacy of quality assessment. Teaching is a much more private activity than research and requires a different approach to quality measurement and improvement while for service, there is a lack of measures of quality.

In conclusion, this qualitative study has been a small first step in the investigation of a complex topic. Universities are enormously complex service systems and quality of service delivery is of immense concern to all persons connected with the university. Further research is necessary, however, to confirm, expand and generalize on the findings reported here.

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APPENDICES

Appendix A

LETTER TO DEAN

387 Elm Street
Winnipeg, Manitoba
R3M3N6
November 18, 1992

Dear Dean:

I am a PhD student at the University of Manitoba working on the research portion of my dissertation. The topic I am studying is the processes by which universities organize themselves for quality in their teaching, research and scholarship and in community service activities. I would appreciate your assistance in my research effort by allowing your faculty to participate in my research. My advisor is Dr. Roger Hall of the Faculty of Management, University of Manitoba with participation on my advisory committee by two other Faculty of Management professors and one from the Faculty of Education.

This research will look at how university faculties organize for quality including their quality policies, excellence goals, program design for quality, quality reporting and quality measurement mechanisms. I would like to obtain information about how your faculty conceptualizes the quality concept and operationalizes quality by interviewing yourself, associate deans, department heads and other key informants within the faculty. I am also interested in the division of quality responsibility between the central university administration and that of your faculty.

If you approve your faculty to participate in my research effort, I would appreciate the opportunity to interview you personally and discuss your ideas about quality in your faculty and your personal role in this area.

The information collected from yourself and members of your faculty will be kept strictly confidential. All responses will be coded to ensure confidentiality and the name of your faculty will not be identified in the final report. The information your faculty will provide will be vital to increasing the knowledge about quality in a university.

I have attached for your information a summary of my research proposal which has been reviewed and approved by the Ethical Review Committee of the Faculty of Management as well as by my thesis advisory committee. If you agree to allow your faculty to participate and to allow me to interview you or would like further information, please do not hesitate to give me a call at 945-2351.

Thank you for your consideration.

Yours truly

Barry Warrack

APPENDIX A

LETTER SEEKING CONTACT AFTER DEAN APPROVES PARTICIPATION

387 Elm Street
Winnipeg, Manitoba
R3M3N6
January 8, 1986

Dr . Associate Dean
Faculty of
University of

Dear Dr. :

I have recently contacted the Dean of the Faculty of _____ concerning research I am conducting for my PhD dissertation. The Dean's office indicated that they had forwarded my request to you. I am a PhD student at the University of Manitoba working on the research portion of my dissertation. The topic I am studying is the processes by which universities organize themselves for quality in their teaching, research and scholarship and community service activities. Of primary interest to me is how the university is addressing the important area of quality. In particular, what structures, processes and arrangements are in place, both formal and informal to enable quality.

I am interested in including the viewpoint of the Faculty of _____ as a professional faculty within the university. I would be interested in the perspective of the Faculty of _____ concerning various quality processes in your faculty and the university and how these quality processes are viewed and where there may be areas which need improvement.

In order to do this research, I am conducting interviews in several faculties within the University of _____ with Deans, Associate Deans, Department Heads and key university

administrative staff. If you are agreeable, I would appreciate the opportunity to interview you personally to discuss your ideas about quality, your role in this area within the institution and to investigate with you the formal and informal quality processes and structures in place within the university.

The information collected from yourselves will be kept strictly confidential. All responses will be coded to ensure confidentiality and neither the names of persons interviewed nor names of faculties or the university will not be identified in the final report. The information you provide will be vital to increasing the knowledge about the processes which enable quality in a university faculty.

My thesis advisor is Dr. Roger Hall of the Faculty of Management, University of Manitoba with participation on my advisory committee by two other Faculty of Management professors and one from the Faculty of Education. I have attached for your information a summary of my research proposal which has been reviewed and approved by the Ethical Review Committee of the Faculty of Management as well as by my thesis advisory committee. If you wish further information about my research and would be able to meet with me, please do not hesitate to write me at the above address or give me a call at 945-2351 (work) to arrange a meeting at a convenient time.

Thank you for your consideration.

Yours truly,

Barry Warrack

APPENDIX A

LETTER OF SECOND ATTEMPT TO CONDUCT AN INTERVIEW

387 Elm Street
Winnipeg, Manitoba
R3M3N6
February 23, 1993

Dr. Head
Faculty of
University of

Dear Dr. :

I had written you a few weeks ago seeking permission to interview yourself about research which I am conducting pertaining to the processes by which universities organize themselves for quality in their teaching, research and scholarship and in the area of community service activities. Of primary interest to me is how the university is addressing the important area of quality. In particular, what structures, processes and arrangements are in place, both formal and informal to enable quality. I am also interested in how organizational politics affect quality processes in the institution and how the ethos of the institution and faculties impacts on quality structures.

This research will look at how university faculties organize for quality including their quality policies, excellence goals, program design for quality, quality reporting and quality measurement mechanisms. In addition, I am interested in the relationships and the division of quality responsibility between the central university administration and various faculties as well as what particular quality related activities are underway in faculties to address issues pertaining to quality.

In order to do this, I am conducting interviews in several faculties within the University of _____ with their Deans, Associate Deans, Department Heads and other key informants. As well, I am also interviewing persons from central university administration areas to discuss their role in quality from a central perspective. If you are agreeable, I would appreciate the opportunity to interview you personally and discuss your ideas about quality, your role in this area within the institution and to investigate the formal and informal quality processes and structures in place within the university.

The information collected from yourself and other members of your faculty will be kept strictly confidential. All responses will be coded to ensure confidentiality and the names of the faculties and the university will not be identified in the final report. The information you provide will be vital to increasing the knowledge about the processes which enable quality in a university faculty.

My thesis advisor is Dr. Roger Hall of the Faculty of Management, University of Manitoba with participation on my advisory committee by two other Faculty of Management professors and one from the Faculty of Education. I have attached for your information a summary of my research proposal which has been reviewed and approved by the Ethical Review Committee of the Faculty of Management as well as by my thesis advisory committee. If you wish further information about my research and would be able to meet with me, please do not hesitate to write me at the above address or give me a call at 945-2351 (work).

Thank you for your consideration.

Yours truly,

Barry Warrack

APPENDIX A

LETTER TO KEY INFORMANTS RECOMMENDED BY OTHERS INTERVIEWED

387 Elm Street
Winnipeg, Manitoba
R3M3N6
January 8, 1986

Dr.

University of

Dear :

I am a PhD student at the University of Manitoba working on the research portion of my dissertation. The topic I am studying is the processes by which universities organize themselves for quality in their teaching, research and scholarship and community service activities. Of primary interest to me is how the university is addressing the important area of quality. In particular, what structures, processes and arrangements are in place, both formal and informal to enable quality. I would be interested in the perspective of students and how these quality processes in the institution are viewed and where there may be areas which need improvement.

I recently interviewed Dr. who suggested that I contact you for an interview as you could add an additional perspective relating to my research. I am interested in your view of the particular quality related activities presently underway in faculties or centrally to address issues pertaining to quality.

In order to do this research, I am conducting interviews in several faculties within the University of with Deans, Associate Deans, Department Heads and key university

administrative staff. If you are agreeable, I would appreciate the opportunity to interview you personally or together to discuss your ideas about quality, your role in this area within the institution and to investigate with you the formal and informal quality processes and structures in place within the university.

The information collected from yourselves will be kept strictly confidential. All responses will be coded to ensure confidentiality and neither the names of persons interviewed nor names of faculties or the university will not be identified in the final report. The information you provide will be vital to increasing the knowledge about the processes which enable quality in a university faculty.

My thesis advisor is Dr. Roger Hall of the Faculty of Management, University of Manitoba with participation on my advisory committee by two other Faculty of Management professors and one from the Faculty of Education. I have attached for your information a summary of my research proposal which has been reviewed and approved by the Ethical Review Committee of the Faculty of Management as well as by my thesis advisory committee. If you wish further information about my research and would be able to meet with me, please do not hesitate to write me at the above address or give me a call at 945-2351 (work) to arrange a meeting at a convenient time.

Thank you for your consideration.

Yours truly,

Barry Warrack

APPENDIX A

LETTER TO CENTRAL ADMINISTRATION KEY INFORMANT

387 Elm Street
Winnipeg, Manitoba
R3M3N6
November 24, 1992

Dr. , Associate Vice President
University of

Dear Dr. :

I am a PhD student at the University of Manitoba working on the research portion of my dissertation. The topic I am studying is the processes by which universities organize themselves for quality in their teaching, research and scholarship and in the area of community service activities. Of primary interest to me is how the university is addressing the important area of quality. In particular, what structures, processes and arrangements are in place, both formal and informal to enable quality. Specifically, I am very interested in how organizational politics affect quality processes in the institution and how the ethos of the institution and faculties impacts on quality structures.

This research will look at how university faculties organize for quality including their quality policies, excellence goals, program design for quality, quality reporting and quality measurement mechanisms. In addition, I am interested in the relationships and the division of quality responsibility between the central university administration and various faculties as well as what particular quality related activities are underway in faculties to address issues pertaining to quality.

In order to do this, I will be conducting interviews in several faculties within the University of with their

Deans, Associate Deans, Department Heads and other key informants. If you are agreeable, I would appreciate the opportunity to interview you personally and discuss your ideas about quality, your role in this area within the institution and to investigate the formal and informal quality processes and structures in place within the university.

The information collected from yourself and other members of your faculty will be kept strictly confidential. All responses will be coded to ensure confidentiality and the names of the faculties and the university will not be identified in the final report. The information you provide will be vital to increasing the knowledge about the processes which enable quality in a university faculty.

My thesis advisor is Dr. Roger Hall of the Faculty of Management, University of Manitoba with participation on my advisory committee by two other Faculty of Management professors and one from the Faculty of Education. I have attached for your information a summary of my research proposal which has been reviewed and approved by the Ethical Review Committee of the Faculty of Management as well as by my thesis advisory committee. If you wish further information about my research and would be able to meet with me, please do not hesitate to write me at the above address or give me a call at 945-2351 (work).

Thank you for your consideration.

Yours truly,

Barry Warrack

Appendix B

STUDY EXPLANATION

This study is being conducted as part of my research for an interdisciplinary PhD program. My thesis advisor is Dr. Roger Hall, Faculty of Management.

This research study will look at the following:

- how quality or excellence is generally defined in a university and faculties,
- how the university and faculties are coming to grips with issues pertaining to quality,
- the processes, structures and arrangements, both formal and informal, in place in faculties and the university in support of quality in teaching, research and community service,
- the politics of quality in a university setting,
- how quality activities are shaped by the ethos of the university and particular faculty,
- the involvement/roles of people in making quality happen
- quality measures in use for teaching, research and community service.

While there has been a great deal of research conducted into the various methods for assessing or measuring quality in a university setting, little of this research has looked critically at how universities organize for quality and the critical factors at work in shaping quality activities within the university. This study intends to focus on quality in university faculties and will link the quality literature with relevant quality systems, processes and structures and arrangements to better understand how quality is being implemented.

The interview will take a total of about 1-1.5 hours of time to complete. You may refuse to answer any of the questions and may withdraw from the study at any time. I would like

the opportunity to tape the interview to assist me with my data analysis.

Please note that all information collected will be identifiable only by code numbers. The list of code numbers and names will be kept in separate locked drawers. All tapes of interviews will be erased and field notes destroyed after the study is completed. Your confidentiality will be respected. The names of participants, faculties and the university will not be identifiable in the written report.

If you wish a summary of the study, it will be sent to you on request upon completion of the study.

If you have any questions, please call me at 945-2351 (work) and 488-0531 (home).

Barry Warrack
387 Elm St.
Winnipeg, Mb.
R3M3N6

Appendix C

CONSENT FORM

This is to certify that I, _____
_____ agree to participate in the study on quality being
conducted by Barry Warrack, interdisciplinary PhD student at
the University of Manitoba. The study advisor is Professor
Roger Hall, Faculty of Management.

I have read the summary of the research project provided to
me and understand the purpose is to look at quality from the
perspective of a member of the Faculty of _____. I
have been given the opportunity to ask questions about the
study and have been informed that the study is composed of a
personal interview with a total completion time of 1.5 to 2
hours. I have been informed of my right to refuse to answer
any questions or to leave the study at any time without
explanation. I am aware that the study will not have any
personal benefits to me.

I have been notified that the transcribed interview
information and field notes will be identifiable only by
codes kept in separate locked drawers. I understand that I
will not be identifiable in the study and that the
information I provide is strictly confidential. I
understand that I will be provided a copy of the consent
form and if I request, a summary of the study upon
completion.

If I have any questions, I am aware that I can call Barry
Warrack at 945-2351 (work) or 488-0531 (home).

My signature below indicates that I have read and clearly
understand this information and am willing to participate.

Participant

Researcher

Date

I would like a summary of the results _____Yes _____No

Appendix D

QUALITY IN A UNIVERSITY FACULTY

INTERVIEW GUIDE

FACULTY:

NAME CODE:

POSITION:

Introduction to Interview Respondent:

The following are a series of questions which centre around the topic of quality in a post-secondary institution. You will be asked a series of questions pertaining to the following areas:

- how is quality defined
- organizational structures and quality processes
- politics of quality
- the effect of the culture and ethos of the institution
- the people involvement in quality
- barriers to quality

I would like to tape record this interview to assist me in transcribing it for the purposes of analysis at a later date. Please note that all information (field notes, tape transcriptions) will be identifiable by code only and will be kept strictly confidential. Your confidentiality and that of your faculty will be maintained and not identified in the final report. Any faculty specific information or terms used during the interview will be "altered" to ensure confidentiality is maintained in the final report.

Transcribed information and field notes will only be identifiable by code.

If you wish a summary of the findings, I would be pleased to send you one upon completion of my research.

Copy of Research Findings: () Yes

This interview will likely take about 1-1.5 hours. May we begin?

January 8, 1986

File:interv2

