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Patricia Rose Hedley

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**FACULTY CHANGING ROLES AND RESPONSIBILITIES
WITH THE IMPLEMENTATION OF A
PROCESS IMPROVEMENT STRATEGY:**

ISO 9000

By

Patricia Rose Hedley

A DISSERTATION

Submitted to
Michigan State university
in partial completion of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

2000

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ABSTRACT

CHANGES IN FACULTY ROLES AND RESPONSIBILITIES A QUALITATIVE STUDY OF FACULTY PERCEPTIONS WITH THE IMPLEMENTATION OF A PROCESS IMPROVEMENT STRATEGY: ISO 9000

By

Patricia Rose Hedley

Understanding the possible changing roles and responsibilities for faculty with the implementation of a significant process improvement strategy (ISO 9000) was the purpose of this study.

This case study was grounded in a review of pertinent literature in the areas of faculty roles and responsibilities; organizational, business change strategies; process improvement literature; faculty motivation, incentives/vitality and communication or diffusion of innovation.

First round interviews were held with four significant administrators who clarified the rationale for the implementation strategy and the specific process improvement strategy that was selected by the college.

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Faculty who were perceived to be engaged in the ISO 9000 initiative were identified by the administrators, on a subjective basis. Twenty-five faculty were then interviewed to determine if they had perceived a change in their roles with this new strategic initiative.

The majority of the faculty did not see a significant change in their roles and responsibilities with this strategic process improvement initiative. However there were changes that did occur. Faculty were now observing other faculty during the audit process and they are being asked to process paperwork differently. The administrators did see a change.

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DEDICATION

To the most significant people in my life, my family,
who have walked this journey with me and who have been
most forgiving of my time at the computer and with my
books.

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ACKNOWLEDGEMENTS

Significant vision and a willingness to challenge the status quo provided me, and many of my colleagues, with an opportunity to complete a life dream. Dr. Roy Giroux of Humber College and Dr. Howard Hickey of Michigan State University envisioned an adult learning opportunity that came to fruition. The determination of these two individuals to develop a truly cooperative offering of a unique program will forever leave a mark in Ontario. It has indeed been an honor and a pleasure to know and to work with both of these individuals.

Dr. Kay Moore who has helped me shape this work over the long haul. Patience and endless words of wisdom will not be easily forgotten. Thank you Kay for sticking with me. I have had some rough times and without your stern but encouraging words this final phase of my journey would never have happened. Kay you are truly a great mentor who has enriched my life, intellectually and professionally. I have been frustrated and challenged but I have never stopped learning from you.

The members of my committee, who challenged me from the first phase. Dr. Anne Austin, Dr. John Dirkx and John

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Beck, I thank you. You certainly know what questions to ask.

Anyone who has been involved in an experience like this, especially if they are an adult, going to school while working full time, knows how important colleagues can be to your success. I Have been fortunate to have a wonderful group of colleagues who traveled this journey with me, although much faster than I did. I am at the tail end of a cohort of professionals who took the opportunity to learn as a group, to support one another and to celebrate the successes

My colleagues at work were most supportive. Dr. Ruth McLean, my boss, my colleague and my friend never questioned why it was taking me so long, but she was always there to offer encouragement and support. I have learned many things from her and continue to enjoy her empowering leadership. Thanks Ruth.

To the two V.P.A's Dr. Richard Hook and Jeanie Sawyer, who made it possible to conduct the research. Richard who helped me make the connections and Jeanie who provided enthusiastic support for this work.

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The willing participants in my study. You have provided the richness to my research, without your candid, honest thoughts I could not have found this such a rewarding experience. Thank you for your time and open dialogue with me.

My family will probably never understand why I had to take this extended trip. My siblings who have supported me in my journey and who have never missed an opportunity to ask how things are going and if I was "finished yet". My mother who has instilled in me a desire to learn, to persevere and to remain human, reminding me to make sure I also looked after myself and spent time with my children.

My second family, my mother and father-in-law, my sisters and brothers-in-law. For the many times during this journey that you have helped us with minding the girls, walking the dog and just being there. Thank you.

The most important people in my life, Erica and Stephanie were growing up while I went to school. Doing homework together, asking why I was doing this and helping me with all the little things. I love you and

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thank you for your unique support and constant understanding.

My Husband and life partner Bob. We have traveled this journey together, course work, assignments, presentations, late nights, frustrating schedules, but most of all an understanding of the desire to complete this life dream. I could not have done this without you. Now it's your turn.

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Chapter I

The Research Problem

"Quality is never an accident; it is always the result of high intentions, sincere effort, intelligent direction and skillful execution; it represents the wise choice of many alternatives."

(Willa A. Foster, in great quotations 1984)

Introduction

Change has become a way of life for most organizations. No longer can private or public institutions focus on "business as usual" (Senge 1990; Mintzberg 1979; Brunet 1994). Academic leaders have made wise choices about strategic future directions and the technical, political and cultural pressures that exist today have significantly influenced these choices (Tichy 1982; Brunet 1996; Senge 1990).

Canadian community colleges have not escaped these pressures, and their chief academic officers have activated plans to re-evaluate strategic directions and future initiatives. Technical advances in computer hard/software have changed the learning environments, and political pressures of resource allocation and public demands for accountability are challenging the traditional paradigms of education and funding.

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Canadian Federal and Provincial governments are striving to reduce the tax burden in all sectors. The public is paying attention to the rising costs of all services and is scrutinizing educational institutions more closely than ever before (Peterson 1993; De Cosmos 1991; Parker 1991; Haverly 1991). Institutional and faculty productivity have become important issues, and financial constraint has become one of the most influential factors in public policy (Massey W.F and A.K. Wilger 1995)

Striving for excellence and a quality product is not a new idea, and, according to Willa Foster, (1984) it is "never an accident." As early as June 24, 1980, NBC-TV was drawing attention to process improvement strategies and aired a documentary entitled "If Japan Can... Why Can't We?" (Walton 1991, 11) which sought to answer the question of how the Japanese had risen from the ashes of World War II to economic gnanthood in a mere 30 years. What was wrong with North American businesses?

By the 1980's, North American business and industry was feeling the pressure of global developments and the increased competition amongst industrial countries. Significant change was perceived necessary, if economic prosperity was to continue. The existing tools, traditionally used for improving operations were not seen to be making a dent in the persistent problems of high

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cost, poor quality, and bad service. Companies felt that they had to take measures more radical than ever before, and they began to attempt to manage the change process.

As a result, several innovative management concepts emerged in the North American business and industry sector, (for example: the total quality movement; management by objectives; requisite organizations and reengineering; process improvement strategies; learning organizations) in an attempt to compete with the successful economic challenges of off shore business.

The philosophy of the learning organization (Senge 1990; Marquardt and Reynolds 1994) advocated the development of "five new component technologies for success" (Senge 1994, 6); systems thinking, personal mastery, mental models, building a shared vision and team learning. These were considered to be the essential elements of any learning organization and paramount if individual and corporate aspirations were to be met (Senge 1990; Marquardt and Renolds 1994).

Elliott Jaques and Kathryn Cason have extensively researched human capabilities and the system of role relationships within organizations. Jaques (1994) purports that the "requisite organization" (152) is one that develops its managerial procedures so that companies are

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Business communities also perceived a need to become globally integrated and linked. Small firms quickly became global competitors through alliances and networks. The global market proved, for some companies, to be key in their success. Partnering with appropriate stakeholders and moving or merging were common realities (Marquardt and Reynolds 1994).

Earlier ideas of continuous process improvement, that had been advocated by Deming, Juran and Ishikawa in the 40's, 50's and 60's, started to re-emerge and gain credibility in Asia and Europe, primarily in Japan and West Germany. Deming, Juran and Ishikawa, each based their quality improvement (process improvement) programs on collecting data, using statistics and testing solutions by experiment. These perceived success strategies are now seriously being considered by the North American private sector.

There was a growing assumption that producing quality products and services was not merely less costly, but in fact, essential to long-term organizational survival (Hackman & Wageman 1995; Deming 1990; Walton 1991). As a result, companies, determined to focus on customer service

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process improvement strategies, have gained new markets and survived during stressful economic times (i.e. British Airways).

Current general business paradigms espouse that to succeed, or even to survive, in today's global economy, companies must refocus and reorganize themselves around their processes. These processes can be described as the end-to-end sequence of events that create customer value and perceived quality (Hammer 1996; Deming 1990; Peters 1982). Michael Hammer (1996) speaks of setting in motion a series of events that have led to a complete rethinking of all aspects of business and this has significantly transformed businesses towards becoming more process-centered organizations.

Quality Improvement in Higher Education

Universities and colleges around the world have looked to the changing business models to address the issues of increasing demand for accountability and maintenance of quality with decreasing funds. Mission statements are being re-written and new environments for learning are developing (i.e., corporate universities, Business University/College partnerships)

St. Lawrence College, a comprehensive community college in southeastern Ontario is attempting to address quality

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issues by embracing the basic process improvement philosophies of Deming, Juran and Ishikawa. The new college president, hired in part because of his private industry background and experience in organizational improvement initiatives, was the stimulus for change.

In November 1992, the college president and the senior college administrators made a conscious decision to actively pursue and implement a Total Quality Management (TQM) program at the college. A significantly rigorous process was undertaken by the college community as a whole to achieve this goal (Sawyer 1996). Striving to achieve certification in one of the internationally recognized quality initiatives culminated in the issuance of the prestigious designation of ISO 9001 (an international standards identification process), in June of 1996.

The move to implement a Total Quality Management strategy and the pursuit of ISO 9000 certification was an innovative one for a Canadian community college. When St. Lawrence College became certified, no other college in Canada, and to the author's knowledge, in North America, had undertaken such an effort. However, two educational institutions, Newport University in Rhode Island and Georgia technical community college in Atlanta, have successfully registered since then. Many institutions had certified some of their service departments but none other than St. Lawrence

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College had targeted "all educative processes" (Corbett 1996).

The ISO 9000 quality system is a series of standards, twenty altogether, that provide a template for an organization to set quality policies and procedures in place. Once this process is completed, organizations are then audited and accredited by a third party as being ISO registered. This component of ISO could be considered similar to an academic audit ("an externally driven peer review of internal quality-assurance, assessment and improvement systems", Dill 1996, 22). The registration is valid for three years and during that time there are periodic audits to assure that the system is being maintained (Godbey 1993; Izadi, Kashef & Stadt 1996; Corbet 1996).

Initial inquiry suggests that St. Lawrence College selected ISO 9000 as the process improvement strategy of choice, because of the customer service focus and the reliance on process improvement through empirical methods (conversation with V.P. Academic, St. Lawrence College, Dec. 1996).

ISO certification was recognized, for St. Lawrence College, in June of 1996 and there have been two audits since then. The President of St. Lawrence College states, "for employees at St. Lawrence College, becoming quality driven has meant

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understanding the environmental factors affecting the marketplace and changing the structures, processes, services and the operating culture" (2). If these changes have influenced the faculty roles and responsibilities is of particular interest to the researcher.

Rational for the Study

Quality may be the most overused word in the English language. According to Daniel Seymour (1993) "people are willing to pay for it, organizations are driven to invest in it, workers are exhorted to produce it." At the same time "quality" is one of the least understood concepts, and one of the most challenging to gain consensus about.

At the core of the quality philosophy is the idea that processes, or the articulation of work patterns, reflect how work gets done and that the best way to improve performance is to increase the efficiency and effectiveness of organizational processes (Seymour 1993; Etner 1993; Lozier & Teeter, 1993; De Cosmos, Parker & Haverly, 1991). The TQM concept requires continuous change that is directly related to the organization's behavioral characteristics and to change this there must be a change in the people, if it is to be effective (Godbey 1993).

In the literature, there seems to be growing evidence that the concept of TQM has application and utility for higher

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education (Lozier 1993; Teeter 1993; Dooris 1994; Peterson 1993). There are however some critics who believe that there is reason to question whether education can be/should be forced into what are perceived as the "narrow confines of business rhetoric" (Seymour 1993). "TQM forays into the academic side of the house have often been rebuffed by the initial negative reaction of faculty members" (Jones and Timmerman 1994, pg. 412). Research identifying factors that contribute to the acceptance of process improvement strategies, especially in education, is lacking.

In educational institutions, faculty are central to any organizational change strategy and implementation. (Austin, 1994, 47) If a change strategy is going to be successful in a college the leaders need to consider the gap that exists, if any, between the current faculty behavior and the desired future state of behavior. Understanding the rationale for selection of the ISO model and the anticipated changes in faculty roles and responsibilities is essential for the researcher, who is interested in investigating current faculty perceptions.

In order for people to function well within any given setting, they must develop an understanding of what reality is. How they perceive this reality will "affect their commitment to a change process" (Beer 1990). Faculty are influenced by several cultures or interpretive frameworks,

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(Austin 1994; Austin 1990; Pettigrew 1979; Burton 1985; Peterson 1990) and these cultures will also affect how "faculty interact, conceptualize, organize their work and participate in the educative process" (Austin 1990, 68).

Disciplinary specialization is the primary unit of membership that faculty belong to (Austin 1990; Kempner 1990; Pettigrew 1979). It is often a particularly strong one that will become the "primary locus of their professional identity" (Austin 1994 p, 49). This may significantly shape the way they behave and interpret change.

There appears to be a lack of documented in-depth empirical investigation that seeks to understand the changing roles and responsibilities of faculty, in the context of a transformational change strategy, such as the implementation of the ISO 9000 initiative. The St. Lawrence College situation affords a great opportunity to better understand and describe the faculty roles and responsibilities in a college that has embarked on a pervasive mission of improvement through change in the educative process.

Research Problem

Gaining insight and understanding into how faculty perceives changes in their roles and responsibilities, when

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engaged in a strategic change initiative is of interest to the researcher.

The design of this qualitative study used an interpretive case study method, to examine how faculty members of a Canadian community college perceived changes in their roles and responsibilities with the implementation of a college wide process improvement strategy, ISO 9000.

Problem Statement:

How do faculty, who have chosen to actively engage in a process improvement initiative (ISO 9000) at a Canadian community college, perceive that their roles and responsibilities in the educative process (teaching and advising area) have changed?

Researchable Questions:

The main research questions addressed in this study are:

- 1. To what extent, and in what ways, was the ISO 9000 initiative intended to affect faculty roles and responsibilities?**
- 2. How did faculty become actively engaged in the ISO 9000 initiative?**

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3. Why did some faculty choose to be actively engaged in this organizational change process (ISO 9000)?
4. What do engaged faculty perceive have been the changes in their roles and responsibilities (in the teaching and advising area) with the implementation of the ISO 9000 initiative?

Significance for the Study

The current government of Ontario, in response to public demands for accountability, is demanding that educational institutions take effective steps to improve the "capacity of our higher education system and to assure the quality of learning" (Lacy 1995, public statement, Toronto Star, March 21).

Hon. J. Snobelen, the past Minister of Education in Ontario, was concerned with efficiency, fiscal accountability and a quality product (Snobelen 1995). The ISO 9000 certification process (International Standards Organization) is one way companies and some educational institutions are attempting to address these issues. Change, experienced by people in organizations, is anything but linear and simple, and what is becoming clear, is that efforts to improve institutional performance must incorporate a fundamental appreciation and the management of employee roles and responsibilities.

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This study contributes to our understanding of the human experience as work environments change and as we learn as adults to improve performance. Collecting and analyzing data to gain an understanding of the impact of the process improvement initiative, as experienced by the faculty of St. Lawrence College, has provided valuable insight and could influence the strategic direction of St. Lawrence College's process improvement strategy.

In the author's current professional position, at a community college, the author is responsible for designing faculty training. Implementation of appropriate faculty professional development opportunities often originates from a strategic organizational initiative. Gaining an understanding of the reasons for engagement, and perceptions regarding the changes experienced by faculty, will contribute to the design of future training opportunities for faculty.

Methodological Approach

An interpretive case study method with an exploratory, qualitative research design was used. Background information was collected from many sources, to inform the researcher on the rationale for pursuit of an ISO 9000 designation and the strategic planning and implementation processes. Interviews with the President, Vice-President

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Academic, Quality Manager and the past Faculty Union President provided the supplementary information necessary to gain a better understanding of the ISO 9000 certification process and an organizational context. These interviews provided an understanding of what the anticipated changes in the faculty roles and responsibilities were.

Source of Data Collection

In an effort to develop an effective case study of one institution that has proceeded strategically with a process improvement initiative, data retrieved was exclusively from St. Lawrence College staff, and support documents.

Interviews and the review of appropriate college documents were the primary sources of data collection. Data collection proceeded in four distinct phases:

Phase One:

Review of all available strategic planning, implementation and evaluation data. (ISO 9000 documentation, ISO Certification Agency information, strategic planning documents, mission and vision statements, audit reports, college newspapers and quality newsletters, etc.)

Phase Two

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Phase Two:

Interviews with policy makers and strategic planners.

(President, Vice-President Academic, Quality Manager, Union President)

The intent of these first two phases was to gather background data that the researcher used in gaining understanding and clarity, regarding the rationale for the ISO 9000 certification process; implementation strategies and anticipated outcomes.

It was anticipated that the first four interviews would assist the researcher in identifying the reasons for a process improvement strategy; rationale for ISO 9000; anticipated outcomes and identification of the faculty informants that eventually became the participants in the phase three interview component. Faculty were those identified as being actively engaged in the process improvement strategy (there were junior but predominantly senior faculty members in the group).

Phase Three:

This phase will include in-depth semi-directed interviews with faculty informants from a variety of disciplines.

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Phase Four:

On completion of the initial faculty interviews, one discipline specific group was identified as being significantly involved in the ISO 9000 process.

In phase four, the researcher facilitated a focus group discussion to solicit information from the faculty (discipline specific) on the ISO 9000 process improvement strategy and the perceived changes in roles and responsibilities from that group's perspective.

Definition of Key Terms

The following terms are in need of definition in the context in which they will be used in this study.

Benchmarking:

An improvement process in which an organization measures its performance against that of their best-in-class competitors/counterparts, determines how those organizations achieved their performance levels, and uses that information to improve its performance (Paris 1996).

Continuous Improvement:

The ongoing improvement of products, services or processes through incremental and breakthrough improvements (Paris 1996). Often used interchangeably with continuous process

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improvement, Process Improvement; Continuous Quality Improvement (CQI); Total Quality Management (TQM);

Convergence:

A coming together, meeting of the minds, agreement, as if two lines come together at a point (Modified from Oxford English Dictionary, 4th edition, 1964).

Culture:

The system of publicly and collectively accepted meanings operating for a given group at a given time (Pettigrew A. 1979). *For the purpose of this study it also includes how groups of people construct meaning.* (Austin, 1994)

Customer:

External: People who are the beneficiaries or recipients of the product or services produced by the organization. Students may fall into this category, when dealing with an educational institution.

Internal: People within the organization who work together to generate those products and services (Chaffee & Sherr 1992 in Hallinan 1995).

Discipline (Academic):

Demarcated knowledge domains with distinct epistemologies and methods. Often acknowledged to have cultures that are

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Educative Process:

Refers to any process, setting, or experience that is associated with growth and the act of growing in a direction where the attitudes and habits open avenues for development in other lines (Dewey 1938). For the purposes of this study, it will involve all the roles and responsibilities reflective of faculty work (teaching, research, practice and professional service and citizenship) during the time that students are engaged in learning. The core processes of design and delivery of opportunities for learning will be stressed.

Faculty:

People with academic appointments at an institution of higher education (Clark 1986, 25). For the purpose of this study, faculty informants to be interviewed will be members of the full-time faculty union, (this union does not include deans, academic chairs or support staff).

Faculty Vitality:

"An inner quality of individuals who go beyond the parameters of their job description, only because they want to". (Schuster, 1985, 23)

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Something that stimulates action or effort (Baldwin and Krotseng, 1985, 6)

Innovation:

An innovation is an idea, practice or object that is perceived as new by an individual or other unit of adoption. (Rogers 1995, 11)

ISO 9000:

ISO 9000 is a documented Quality Management System that provides structure, measurement, control and systematic quality improvement. It is a simple, generic standard that helps organizations define a quality system and then manage it. It focuses the quality system on customer satisfaction, ensures planning for quality, defines leadership and responsibility for quality and controls the processes critical to quality. It has now been adopted by over 100 countries and is increasingly becoming a requirement to do business (Modified from an information update document sent out to all staff at St. Lawrence College).

Quality:

A subjective term for which each person has his/her definition. In technical usage, quality can have two meanings (1) the characteristics of a product or service

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that impact on its ability to satisfy stated or imply needs and (2) a product or service free of deficiencies (Deming 1990).

Standard:

A recognized example of something against which actual performance can be compared (Modified from Collins English Dictionary, 1964).

Total Quality Management (TQM):

A management approach to long-term success through customer satisfaction that is based on participation of all members of an organization in improving processes, products, services and the culture they work in (Seymour 1993).

Conceptual Framework:

The following areas of research will form the foundation of the conceptual framework for this study. Review of research relevant to this study will include:

Core Areas:

1. **Faculty Roles and Responsibilities (work)** to identify current faculty roles and responsibility's literature, and to facilitate understanding of any perceived change.

2. **Organizational change theory** ISO 9000, to gain understanding on the rationale for selecting the ISO 9000

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model and implementation strategies. To gain insight into some of the issues, problems and solutions with any organizational change.

3. **Faculty Motivation/incentives theory**, to gain an understanding of the reasons for engaging in any initiative or organizational change strategy.

4. **Innovation and Communication of innovation**, to understand normal patterns of diffusion of innovation and interpretation of responses from participants during the initial phase of implementation.

Contextual Areas:

5. **Business change strategies literature** to become familiar with the current options for business reengineering and to gain understanding regarding process improvement options.

6. **Process improvement literature** of which ISO 9000 is an example. To understand the nature, rationale and tools of a process improvement strategy so that a solid foundation is developed by the researcher. To better understand the anecdotal responses of participants. To become familiar with the language of process improvement initiatives.

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Operational Areas:

7. **Qualitative research methodology**, interview techniques, grounded theory and data analysis, to provide the operational basis for the research design methodology.

Limitations and Delimitations:

1. ISO 9000 was the chosen process improvement strategy of St. Lawrence College. It is not the intent of this study to evaluate whether this was the best method for the college or if the faculty understand all the possible tools/techniques of this process.

2. Because this study makes use of research designs associated with naturalistic inquiry, it is anticipated that a significant degree of researcher subjectivity may be evident in the methodology.

3. Since data interpretation is subjective, the results, conclusions and recommendations are limited to the place and time in which the study was conducted.

4. Due to the fact that this study takes place in one college, with a small number of participants, transferability of the findings was not the primary objective.

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5. As participant responses and the researcher's interpretations are again subjective, personal biases may have distorted the findings and recommendations. An attempt to acknowledge bias by the researcher has been articulated when known.

Organization of the Study into five chapters:

Chapter one introduces the topic, identifies the problem, explains the significance and purpose of the study, defines key terms, assumptions, and identifies the limits of the research.

Chapter two contains a review of the literature in the area of strategic change management, organizational improvement strategies, total quality management initiatives, TQM in education, faculty motivation/incentive theory and faculty work (roles and responsibilities).

Chapter three describes the research design, participant selection process, method of information gathering and data analysis plan. Appropriate references support the qualitative research methodology and interviewing techniques chosen.

Chapter four describes the findings and shares anecdotal responses from the participants, to the appropriate questions asked.

Chapter five draws conclusions and interprets meaning from the responses. Insight into possible future research areas has been presented.

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Chapter II

A Review of the Literature

"Success can only be achieved when everyone involved in higher education has the commitment, the motivation, and the means to embody the culture of quality in every lecture, ... every laboratory that is supervised, every essay that is written or paper that is marked." William Taylor Council for the Accreditation of Teacher Education in the U.K. University Affairs (August-September 1993)

Introduction

A review of the relevant literature for this study focused on the following conceptual areas: 1) faculty roles and responsibilities 2) organizational/business change strategies 3) process improvement literature 4) faculty motivation/incentives and vitality theory and 5) communication/diffusion of innovation.

Faculty Roles and Responsibilities

Faculty work, roles and responsibilities, have changed considerably since Charles Eliot, an early president of Harvard University, said "the prime business of American professors ... must be regular and assiduous class teaching" (Boyer, 1990 in Gray and Diamond, 1994, p.69). This was very much a "clerical model" with a teacher and disciples or followers. The role of faculty and students are now quite different, with greater collaboration between

students and instructors being stressed (Braskamp and Ory, 1994)

As a result of more recent close scrutiny, the roles and responsibilities of faculty work and its complexities have become apparent (Braskamp and Ory, 1994). Bowen and Schuster, 1986; Rhodes, 1990; Rice, 1991 and Boyer 1990, have published extensively on faculty work classifications. They seem to agree that the work of faculty "is not uniform across all institutions or disciplines" (Braskamp and Ory 1994) and is most often negotiated with their unit leaders to stay within broad parameters of the institutional or departmental expectations.

Since World War II there seems to have been an accepted broadening range of legitimate faculty work with the faculty maintaining autonomy and having significant involvement in negotiating assignments. These assignments may reflect individual preferences, expectations of their departments, disciplines or institutions as well as the needs of their students.

According to the current Ontario college faculty collective agreement (1994) under which all Ontario Community College faculty abide, a professor or faculty member is defined as:

"being responsible for providing academic leadership and for developing an effective learning environment for students. In addition the professor may, from time to time, be called upon to contribute to other areas ancillary to the role of professor, such as student recruitment and selection, time-tabling, faculty design, professional development, student employment, and control of supplies and equipment." (OPSEU Faculty Handbook, 145)

Keeping this definition in mind, as the working definition of the collective agreement, review of the literature suggests other possibilities (See table 2.1)

**Table 2.1: Terms used to classify faculty Work
(Information summarized from Braskamp and Ory 1994,79)**

<u>Researcher</u>	<u>Terms used</u>
Bowen and Schuster Rhodes Rice Boyer	*Teaching *Research *Creative Activity *Practice and Professional Service *Citizenship
Gray and Adams	*Working with Students *Professional Citizenship *Scholarly activity *professional Service
Braskamp and Ory	*Teaching *Research and Creative activity *Practice and Professional Service *citizenship

The researcher has chosen Braskamp and Ory's classification to form the basis of the current research and questions. This is a choice of convenience as one was not seen as better than the other but Braskamp and Ory's classification was seen as succinct. They were also very closely related to Bowen; Schuster; Rhodes; Rice and Boyer, with research and creative activity, integrated by Braskamp and Ory (1994).

Past studies of faculty workload show almost uniformly that faculty members spend considerable time on the teaching component of their work (Bowen and Schuster, 1990; Winter and Bowen, 1982; Drew, 1985). In a study done by Charles Carter (1978), an attempt was made to describe faculty work statistically. Using a diary method to record work done during a specific time, the following was discovered:

"faculty work on average forty-seven weeks a year with an average of fifty-one and one half hours per week" (70).

The conclusions of this study (done in Great Britain) paralleled those of similar studies in the United States (McElhaney, 1959; Gerstl, 1959; Stecklein, 1961; Keene, 1971; Thompson, 1971 in Blackburn, 1978).

A number of workload studies show that faculty at community colleges give "about 80% of their effort to teaching" (Blackburn, 1978, 81). These studies may not, however, capture the essence of the meaning of work in the college,

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Community College faculty in Ontario, according to the collective agreement (1994), are hired to "teach assigned courses and to design/revise and update courses" (145). There is also general agreement that the primary role of college faculty members is as the teacher (Gray and Diamond 1994). This however, is not intended to indicate that Ontario college faculty neglect the other areas of research, practice and professional service or citizenship but these areas will not be the focus of investigation, in this study.

It is important to stress that faculty engaged in this study defined their roles and responsibilities in their own terms and from their perspective. However, the researcher attempted to focus the discussion during this investigation on only one area of the faculty work classification, (teaching) as it is agreed in the literature, to be the predominant activity of faculty.

The faculty role as "teacher" was the intended area of study. This involved all of the areas of instruction, advising, supervising, creativity around learning activities and professional development activities that a faculty member engages in, (Braskamp and Ory, 1994;

Blackburn, 1978; Carter, 1978; Froh, Gray and Lambert, 1993; Gray and Diamond 1994) especially as it relates to the ISO 9000 process improvement strategy.

Organizational/Business Change Strategies

Very few people would contest that we are living in a time of rapid and sometimes chaotic change. The old ways of predicting, modeling and planning do not seem to serve us as well as they once did. The rational theories of management and bureaucratic order developed by Taylor and Weber (scientific management) no longer seem to apply to our current educational environments.

Theories of organizational structure and management have changed significantly over time. Management by objectives, requisite organizations and process improvement strategies: and reengineering have emerged and gained favor over the past decade.

For centuries, quality products were determined by simple inspection and perceived market value. With the Industrial Revolution, came the presence of the assembly lines, and a perceived decline of craftsmanship and the development of central inspection departments. (Juran 1989) As the Industrial Revolution evolved, responsibility for quality became diffuse and often this led to a poor quality product. From 1910 to 1940, scientific management theory

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prevailed, with a focus on decreasing costs and increasing productivity (Owen 1981; Juran 1989).

From the 1930's to the 1950's a more human approach was also paralleling the development of the scientific theory of management. Max Weber was beginning to study the bureaucracy of organizations as they became increasingly more complex, (post industrial revolution) and on the people within these organizations (Juran 1989).

As developed countries moved through the war years, there was a massive production drive to turn out large numbers of highly technical weapons that were often made at the expense of quality (Cornesky 1993; Wallin & Ryan 1994). After the war, with the baby boom in North America, came a demand for consumer goods in large quantities, and both business and consumers seemed willing to put quality on the back burner (Walton 1991; Anderson 1993).

In Japan however, rebuilding of the Japanese industrial base began with a quest for quality. Japanese industrialists felt that they needed to strive for quality, if they were going to break into the North American market. This meant that the Japanese must have a better product at a lower price. Gradually, and after Japanese industry embraced Deming's ideas, Japanese products became largely synonymous with quality, while many American products

declined in total quality or stagnated (Wallin and Ryan 1994; Cornesky 1991; Walton 1991; Spanbauer 1992.)

By the late seventies and early eighties, North American companies were struck by a severe recession that seemed again to point out the relative success of the Japanese economy. Private sector firms and experts began to re-look at the reasons for Japanese success and, this time, the attempt was made to delve deeper in terms of the functioning of Japanese industry (Anderson 1993).

What emerged, were four names that have become synonymous with the quality movement: W. Edwards Deming, Joseph Juran, Philip Crosby and Kaoru Ishikawa (Walton 1991; Hackman F. R; and Wageman 1995). Often Armand Feigenbaum is noted along side as having coined the phrase "Total Quality Management" (Wallin & Ryan 1995; Cornesky 1993; Zemke 1993). Deming's ideas, as written up in his classic TQM book, Out of Crisis, had been particularly well received by the Japanese (immediately post war). In Japan the quality management systems had replaced the Fordist mass production system that was still operating in North America (Walton 1991).

Total Quality Management (TQM) became the phrase most widely used to describe the essence of the Japanese management system. Gradually TQM has taken hold outside

Japan and it seems to be everywhere. The Conference Board of Canada has pushed the concept, and the Manitoba government has talked about Quality Management as part of government policy.

In October of 1992, just days after the Quebec referendum defeat, then federal Industry Minister, Michael Wilson gave his first speech honoring and endorsing the private sector initiative on TQM and supporting the creation of a National Quality Initiative.

Process Improvement Literature

Quality management or process improvement strategies are part of a comprehensive management model of industrial production and service delivery. The so-called "flexible production" paradigm has replaced the older Fordist model based on scientific management and Taylorism and includes several different elements (Anderson 1993). The TQM part of this equation has become the dominant trend as it has been successfully linked to Japan, the country with the highest performing industrial economy in recent years.

As in the case of any relatively new management strategy, there are a host of variations in terms of what exactly TQM means and how it is to be applied. Management consultancy firms and business writers have had a field day in emphasizing these. Every main company seems to have its'

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version, from continuous quality improvement to Plan-Do-Check-Act cycles.

Continuous improvement models, or whatever individual institutions call it, seem to have similarities. TQM tends to exert a constant pressure to **change work processes** or techniques and to strive for better and better results. **Waste in the process is seen as a major source of lost profits**, and companies aim at **reducing variation** and error in all process. Scientific **methods of production and inventory control** are applied at every step of the process and there is encouragement to **measure continuously** the quality and amount of output. TQM companies or institutions also solicit and implement **employee suggestions**, and **training** is increasingly emphasized (Walton 1991; Wallin and Ryan 1994; Cornesky 1991; Dooris and Teeter 1994).

Lozier and Teeter identified the underlying foundations of Total Quality Management as: establishing a mission, focusing on the customer; creating a vision; improving the process continuously; systematically analyzing processes and outcomes; and promoting participation and recognition (Lozier & Teeter 1978; Sherr & Lozier 1991; Senge, 1990).

The President of St. Lawrence College has stated that there has been an aggressive pursuit of a process improvement

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strategy that addresses all components of college work. How this relates to changes in faculty roles and responsibilities will be investigated in this proposed study. If the principles of continuous improvement are truly embraced, faculty should be demonstrating a change in their work patterns and behaviors to reflect the above noted characteristics of a process improvement strategy.

TQM predictors of success

The President of St. Lawrence College has stated that the ISO process improvement strategy is working well. The external auditors have stated that they are exceeding expectations. However, it may be difficult to predict the true level of success, as there are many factors that need to be considered and assumptions that may be made.

Review of current literature suggests that the predictors of success regarding TQM can be clustered into three areas:

Individual Characteristics: gender, age, discipline affiliation, and years at an institution are important considerations in how faculty perceive aspects of their work environment (Jones and James 1979, Bess 1982; Austin and Gamson 1983 in White, Spencer & Peterson 1993).

Institutional characteristics: Institutional type, control (public or private), size, and location. (White, Spencer & Peterson 1993). **Organizational and Administrative Climate:** academic management practices related to faculty,

administration, and students (White, Spencer & Peterson 1993)

Answers about the effect or the success of any process improvement strategy remain elusive. Peter Senge (1994) states "organizations learn as the mental models of the people in them change". It was anticipated that the research proposed at St. Lawrence College would provide insight into whether faculty perceive a positive change in their roles and responsibilities. This may support the claim that the ISO is "working well".

Tools of Quality Management

Quality management philosophy, regardless of the model used (Deming, Juran, Baldrige, or ISO 9000), encourages practitioners to use approximately seven different counting tools (Deming in Walton 1991; Zemke 1993; Wallin & Ryan 1994; Cornesky 1991; Spanbauer 1992). Some of these tools have been with us for decades and utilized effectively, before becoming associated with process improvement strategies. These are identified more specifically in appendix A. The tools may or may not be used by the faculty at St. Lawrence College as the scaffold of the process improvement initiative but there was evidence that they understand these tools and when they could be used in the educative process. The researcher expected to see that faculty, who are described as engaged in the ISO 9000

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process, would make reference to these tools in their anecdotal responses.

Processes on the other hand are a sequence of events that will require the use of different strategies. Reference is made in the literature to the use of Deming's "plan-do-check-act" cycle, brainstorming, nominal group techniques and force-field analysis (Zemke 1993; Deming in Walton 1991; Cornesky 1991; Spanbauer 1992). These are simply generic models to help with any problem. (See Appendix B and C). These are noted at this time, as faculty in their anecdotal responses should reference them, if they are using the full potential of the process improvement strategies in their work.

ISO 9000

ISO 9000 is one process improvement model used in the industrial and educational sector. It is of interest to the author, as this is the Total Quality Management strategy (process improvement strategy) that St. Lawrence College has chosen to emulate in their process improvement initiative. Any one of the other models could just have easily been selected except for the Baldrige Award, available only to organizations in the United States at the time of this study.

ISO 9000 is a documented Quality Management System that provides structure, measurement, control and systematic quality improvement (Plexus Corporation training document 1996). It is designed to help organizations set quality policies and procedures, and to focus, on customer satisfaction.

There are a number of categories for ISO 9000 and these are articulated in Appendix D. St. Lawrence College has been certified at the ISO 9001 level, the most comprehensive level, and has stated publicly that all processes within the institution will be evaluated against ISO 9000 standards.

The President of St. Lawrence College believes that the ISO 9000 standards are generic enough that with modification, they can be applied to the educative process (Corbett 1996). The standards cover such areas as management responsibility, inspection and testing, corrective and preventive action, records and training (refer to Appendix E).

The researcher was interested in whether faculty were familiar with this document and if they understand where the work that they do, is reflected in the document. It was anticipated that the faculty would refer to the standards document in their anecdotal responses and general

discussion of how the ISO 9000 model has changed their roles and responsibilities.

Process Improvement in Education: Historical

The contemporary quality movement has had a long history (Garvin 1988) and discussion of institutional and academic quality in higher education literature dating back over a century (Fairweather and Brown 1991; Kuh 1981; Webster 1986 in White 1993). Contributions to the quality movement seem to be divided into four distinct areas: inspection, statistical quality control, quality assurance, and strategic quality management. The last of these seems to be the management theory in vogue today (Wallin & Ryan, 1994) and is of particular interest to the author.

Strategic quality management practices (process improvement initiatives) have been credited for recent industrial and business successes. Educators who are now dealing with similar industrial issues (declining funds, increased demands for accountability and quality, etc. (Hallinan 1995) have been looking to these models for possible answers.

Deming, Juran and Crosby all worked within the framework of industry or private sector business. They did not propose that the process improvement strategies successful in business were meant for the public sector. As a result,

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this has become one of the most contentious issues regarding the implementation of TQM into the educational setting. Business, where these initiatives originally gained notoriety, primarily deals with things or product and education deals with a very complex set of variables.

This fact alone may be the most significant issue, as people are individuals. Each comes to work with different needs, talents and interests, and with a certain ability to create his/her career pattern (McLagan 1991). However none of this changes when people are asked to work collaboratively with colleagues, as in most quality initiatives.

Criticism of TQM in education seems to come from the apparent "lack of intersection with established academic knowledge, particularly organizational theory in education" (Neumann & Pallas in Hallinan 1995). Many of the writings favoring the adoption of TQM in educational institutions, treat Demings "14 points" as a theoretical base but they lack the "coherence of a theory and are themselves unconnected to organizational theory" (Neumann and Pallas 1995, p 46).

Sheer and Tector (1991) also state that there are important differences between business and higher education that must be considered. They are concerned that many colleges and

universities are attempting to implement business strategies without regard to the differences in goals, values, history and barriers that exist in educational organizations (Sherr and Tector 1991).

Researchers in education have not concluded the success or failure of trying to implement process improvement strategies (Howard 1993; Hallinan 1995). Consensus has not been reached on the value of TQM in education nor with its applicability to scientific management, human relations, or strategic planning and models of organization (Neumann & Pallas 1995 in Hallinan, 1995).

Regardless of whether TQM applies to education or not, the college under investigation has implemented the philosophy and this will play an important role in the investigation of perceived changes in faculty roles and responsibilities.

Implementation of Total Quality Management in Education

The implementation phase of quality management strategies has been well documented in the literature (Yanckello 1993; Howard 1993; Broughton 1993; Harris 1993) and many acknowledge that the verbal commitment to Total Quality Management is easier than the implementation (DeCosmo 1991). Most have implemented TQM strategies in response to calls for increased accountability to external forces such as the technical explosion; taxpayer demands; and

increasing international competition (Peterson 1993; Harris 1993; Corbett 1996). They also acknowledge that the top personnel must show a constancy of purpose to convince others that TQM can happen (DeCosmo 1991; Harris 1993; Corbett 1996; Peterson 1993; Acherman 1993).

The American Council on Education (1993) finds that "70% of higher education institutions are using Total Quality Management techniques" (in Horine & Hailey 1995 pg. 7), and there is evidence that many are struggling with the challenges of implementation (Horine & Hailey 1995). De Cosmo 1991, encourages us to remember that implementation requires patience as it represents a "revolution in management philosophy but an evolution in implementation" (24).

According to some (Seymour 1993; Harris 1993; Corbett 1996; Shaw 1993), the foundation upon which excellence in education has been built is shifting from a resource model (money directed to support educational activities) to a performance model (money provided after proof of effectiveness is demonstrated) with a customer-focused approach that demands that we know exactly whom we are serving and why (Corbett 1996; Shaw 1993).

Research done by Robert Winter (1993) at the University of Illinois at Chicago, while he was coordinator of the

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quality improvement work group, concluded that it was "imperative for top management both to be involved in and to demonstrate commitment to the quality improvement process" (Winter 1993, 102)

Syracuse University implemented a process improvement strategy and chancellor Kenneth Shaw shared his observations in an article called "Sunflower Seeds at Syracuse: Cleaning Up with Quality" (1993). He encourages readers to ensure plenty of time is given to any implementation strategy and to make sure you celebrate the little successes along the way. Rewards and acknowledgments have also been identified as being of significance to faculty.

TQM issues in education

A significant controversial issue surrounding TQM in education is that of the use of the terms "customer" and "customer service." Identification of the internal and external customers of business seems automatic, but those in education are not as easy. There are well-established paradigms in education and the use of business language is often perceived to be uncomfortable for faculty.

Wallin and Ryan (1994) conducted a study of 587 community colleges (with a 35.6% return rate) that was designed to determine the extent of member college's interest and

experience with total quality management. A significant number of respondents expressed a basically positive attitude towards the concepts of TQM. However, many had serious reservations concerning time, costs and commitment (Wallin & Ryan 1994). What seems to be lacking in the literature, is an in-depth investigation regarding whether education can/should work successfully in the business model of customer service and continuous process improvement.

Between 1991 and 1996 increasing documentation has appeared in the research journals, discussing successes and issues in TQM. (DeCosmo 1991; Haverly 1991; Chickering 1993; Cornesky 1993; Seymour 1993; Shaw 1993; Yancello 1993; Corbett 1994; Baker 1995 ect.) Many of these published studies focus on the service side of education and the researcher sees a need for in-depth investigation from the faculty perspective.

One of the main hurdles to the acceptance of TQM in education is the perceived difficulty of finding indicators that can be useful for higher educations' core processes of teaching and learning. The complexities and ambiguities of the academic processes are challenging but St. Lawrence College has attempted to articulate these using the framework of the ISO 9000 process. How faculty, who are perceived to be committed to the process improvement

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strategy, view their roles and responsibilities within this structure is of interest to the researcher.

Dooris and Teeter were challenged by the concept of how you would proceed with assessing institutional performance in a total quality environment. They had noted that Dan Seymour (1994) was seeing a slowdown in the quality movement due partly "to the fact that much of the literature had been descriptive" (p.52) The feeling was that "people in higher education, who now understand the philosophy of TQM, needed more specific advice about how to radically reexamine and improve processes on campus" (52). However, the frustration came when there was perceived to be a lack of "easily implemented, all-purpose indicators for assessing the institutional performance" (Dooris & Teeter, 1994, 60)

The jury may still be out, in many educators' minds, but the President of St. Lawrence College and the upper management team of the college have stated publicly that the "quality initiative is doing what it is supposed to" (news release, St. Lawrence College, Nov. 1996) and there is an optimism in their attitude that cannot be overlooked.

A healthy skepticism remains in the evaluation of ongoing quality processes. If education is going to benefit from the implementation of such process improvement strategies,

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it is important that process improvement strategies be studied and evaluated through a variety of lenses.

Impact/Effect of TQM in education

The impact of process improvement strategies in education has been well documented by Neumann and Pallas, (in Hallinan 1995, 41-43). They have provided an extensive list of institutions that have attributed positive changes, in some element of college work, directly to their quality initiatives.

Although the above noted changes are well documented, there has often been too little evidence presented to know whether the results of the research are indeed reasonably attributed to the implementation of TQM, or may in fact be due to some other factors. There are often so many other factors influencing the change noted that one cannot guarantee that they are the result of the process improvement initiative (Hallinan, 1995; White, 1993).

Incentives/motivation and Faculty Vitality

How faculty will respond to a large scale organizational change is somewhat unpredictable. Some will willingly embrace and actively engage it, others will slowly accept it once they see the benefits and still others will openly resist it. Predicting who will respond in a particular fashion is not as easy. Bland and Schmitz (1988, 46)

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state, "faculty vitality occurs when there is a match between an institution's mission and the faculty members' goals".

Is there something in the ISO 9000 initiative that affords an opportunity for faculty to become motivated? Why have some faculty chosen to actively participate in this organizational change strategy and others have not?

This study focuses on faculty that are identified as being actively engaged in the ISO 9000 initiative. The criteria for "actively engaged" was established by their peers or supervisors (and will be further explored later) when they were referred to the researcher and for the purpose of this study, these faculty will be considered "engaged faculty". (Professors committed to the ISO 9000 process)

Understanding why these faculty were motivated to participate actively in the ISO 9000 may be explained by examining intrinsic or extrinsic incentives. McKeachie, 1979; Baldwin and Krotseng 1985; Lawrence, 1985; Bland and Schmitz 1988 and Veysey 1967 explain "commitment" or "vitality" as incentives or conditions, that push a person to participate.

The intrinsic incentives of the academic career have (according to McKeachie, 1979 in Baldwin and Krotseng,

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1985, 8) "a greater relationship to faculty vitality than do extrinsic rewards". Things like love of learning, fellowship, concern for student development, desire to guide the directions of a career, or autonomy may be perceived as the most significant motivators by faculty (Lawrence, 1985; McKeachie, in Baldwin and Kotseng, 1985; Schuster, 1985; and Bland and Schmitz, 1988)

Conditions that are perceived to pull faculty into participation, or "extrinsic factors", may also explain why the faculty have actively engaged in the ISO 9000 process. Does the ISO 9000 structure provide a more appropriate scaffold for faculty to work effectively? Extrinsic incentives, such as work load; working conditions; supervisory practices; career opportunities; tangible rewards; or the way in which a faculty member's time is utilized may be the reason for engagement. (Cummings and Schwab; Schuster, 1985; Baldwin, 1985).

Faculty may participate actively in this initiative because they are "vital faculty" who can appreciate either the intrinsic or extrinsic incentives that ISO provides them. It will be interesting to see if faculty perceive different changes in their roles and responsibilities depending on what form of motivation is involved for them. They may be motivated by two forms of incentive (intrinsic and extrinsic) and whether the ISO 9000 initiative sets

conditions of greater intrinsic or extrinsic incentives will be interpreted from faculty anecdotal responses.

Innovation and Diffusion of Innovation

The ISO 9000 initiative at St. Lawrence College is an innovative organizational strategy. Traditionally a private/corporate process improvement strategy, ISO's applicability and acceptance in any educational institution, is being questioned and monitored. Innovations such as ISO 9000 present individuals and organizations with potentially "new alternatives or alternatives, with new means of solving problems" (Rogers, 1995, xvii).

St. Lawrence College is in the "implementation" phase (Rogers, 1995, 392) of their innovation process and many of the issues of initiation have been addressed. The extent to which diffusion of this innovation at St. Lawrence College has occurred, will not be the intent of the current study, however much of the "engaged faculty" behaviors may be explained by understanding the current "diffusion research" documentation.

According to Rogers (1995), diffusion research dates back to earlier social science studies, in particular, rural sociology. Gabriel Tarde, a leader in sociological research (laws of imitation, Rogers, 1995), states that

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diffusion of innovations (like ISO 9000) is a "basic and fundamental explanation of human behavior" (Tarde, 1969).

Information about anything new, is often sought from near-peers, especially information about what they think of its' value. The meaning to them is then "gradually worked out through a process of social construction" (Rogers, 1995, xvii). This may be experienced through planned or spontaneous activities helping to concretize the attributes of the innovation.

The early adopters, "engaged" faculty at St. Lawrence College have developed a positive perception regarding the ISO 9000 process and have demonstrated a commitment to the process. Their anecdotal responses may lend support to the "diffusion of innovation" research of Rogers; Dearing; Singhal; and Valente.

The characteristics of innovations may also influence the rate of adoption and it is anticipated that the "engaged" faculty will, in their anecdotal responses, support the notion that ISO 9000 was supportive of the characteristics noted in Rogers (15). Faculty will/should indicate that ISO 9000 was perceived to be better than the ideas it superseded, consistent with their existing values; easy to understand/try and observable (Rogers, 1995; Havelock and Miles, 1964).

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Summary

Ongoing organizational change seems to be the current norm in both the private and public sector today. Several strategic organizational change strategies have been developed to address this rapid change and new demands of public accountability. St. Lawrence College has chosen to implement a process improvement strategy, ISO 9000, which has been traditionally present in the private sector. Whether this particular model is transferable to education is of interest but not the primary focus of the proposed research.

Process improvement strategies advocate ongoing evaluation and diligent attention to the work processes. Gaining an understanding of the traditional faculty roles and responsibilities has set the foundation for investigating the faculty perceptions regarding any changes in their work that may be directly linked to the ISO 9000 change strategy.

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Chapter III

Design and Methodology

"Qualitative research is an approach rather than a particular set of techniques, and its appropriateness derives from the nature of the social phenomena to be explored. (Morgan and Smircich, 1980)

Introduction

An exploratory, qualitative research methodology was used during the data gathering phase as it seemed best suited to describe the experiences, explore the perceptions and to gain understanding regarding changes in faculty roles and responsibilities, with the implementation of the ISO 9000 initiative.

Trying to understand the processes through which human beings concretize their relationship to their world gives way to the naturalistic methods of inquiry. The experience that working individuals have in their work is not uniform and requires a method of investigation that will "attempt to understand the process and change in a dynamic environment" (Morgan & Smircich, 1980).

Positivistic methods of inquiry will not allow us to examine these social phenomena in the way proposed. Conducting research on site through interview, in a natural setting, is best suited to encourage participants to

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reflect on and to describe their experiences and to share important information with the researcher. (Mezei 1994, in unpublished research dissertation; Bogdan and Biklen, 1982; Lincoln and Guba, 1994; Magoon, 1977)

On review of the literature, there is no agreement on what naturalistic evaluation is, or is supposed to look like. It can however be classified into one or more of the following categories (As stated by Guba, 1987); Exploration (to explore areas that are initially impossible to conceptualize and so lay the base for a more rigorous investigation later); Description; Illustration (to provided insight); Realization (case study); testing (to test hypotheses or to answer questions that investigators specifically target ahead of time).

The present study is primarily one of exploration although illustration and realization will be evident in the methodology. The researcher attempts to make sense of the personal stories of the faculty participants and to interpret how they intersect (Glesne & Peshkin, 1992). Through constant comparative analysis (see appendix K for theme tags use) the researcher developed ideas and hypotheses through discovery. (Grounded theory; Guba, 1987; Glesne and Peshkin, 1992)

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The naturalistic method of inquiry is purported to be more flexible than the positivistic method (Morgan & Smircich, 1980) and this leniency allowed the researcher to modify the study slightly and to investigate significant events as they developed during the data collecting, and analysis phase. The researcher also extended some latitude in working between the different and sometimes overlapping perspectives of Qualitative research methodology. (Lincoln & Guba, 1986; Moustakas, 1994)

Research Design

Qualitative researchers may differ in the exact methodological design of investigation but there are several underlying principles that are apparently common to all. (Lincoln & Guba, 1994; Moustakas, 1994)

The underlying philosophy of this study endeavors to maintain the following principles. **First, recognizing that qualitative research methodology has value** is paramount, as it has allowed research to progress into areas that have seemed unapproachable through the more traditional positivistic methods of quantitative analysis.

Second, every effort was made to search for "meanings and the essence of the experiences" (Lincoln & Guba, 1994) rather than pure measurements and explanations. **Third, the total number of participants in the study was relatively**

small (n= 25) so that **in-depth investigation and documentation occurred**. Anecdotal responses and stories from the participants was encouraged, recorded, coded and analyzed to enhance the database.

Background data was collected from various strategic planning, implementation and evaluation documents that have been published at St. Lawrence College. These were reviewed by the researcher and analyzed for information concerning reasons for implementing a process improvement strategy, selection of ISO 9000 and changes in faculty roles and responsibilities.

All material were **transcriptions of the first-person** experiences. Every effort was made to transcribe interviews in completion, as the transcript is what "provides the fixed point of reference for comparing alternate interpretations" (Burnaby handout, Sept. 20, 1993, 1). It also allows the researcher to trace the thoughts of the participant, if the conversation goes off track.

The data collected, (the transcribed interviews) was the primary means of interpreting and understanding the **experience**. The researcher believes that this provided a rich source of material and it was important that the tapes be transcribed in totality as "people remember what they

think was meant by the speaker, not the actual words”
(Burnaby 1993, 1).

There is a strong belief that qualitative researchers and the techniques used allow the researcher to share in the understanding and perceptions of others and to explore how people structure and give meaning to their lives (Berg, 1994). There is then a distinct possibility that faculty will gain the opportunity to reflect on and validate their experiences and to create meaning through enhanced understanding as they progress through the interview phase.

Population to be studied

The participants came exclusively from St. Lawrence College in Kingston Ontario. They were from all three campuses (Kingston, Cornwall or Brockville). (At the time of the research, each campus was a stand-alone campus, providing full-time programs to the local communities)

Phase I:

Review of all appropriate documents from St. Lawrence College. Receive appropriate approval from the MSU ethics committee (see appendix L).

Phase II:

Four individuals, who played a significant role in the implementation of the process improvement strategy

(President; Vice-President Academic; Quality Facilitator and Faculty Union President) were interviewed. The intent of these interviews was to gather information regarding: the rationale for implementing an organizational change strategy; the rationale for choosing ISO 9000 as the CQI process; the implementation process and the anticipated changes to the faculty roles and responsibilities.

Faculty recommended for participation, were identified during the initial four interviews and during interviews with other faculty. In the beginning of the process, the President, Vice-President, Quality Manager and the Faculty Union President were solicited for the names of faculty to be interviewed. Faculty identified during the first round of interviews were those who are perceived to be engaged (from the senior management's perspective), in the process improvement initiative. These faculty are thought to be (from the researcher's perspective) the most likely to provide the information under question (changes in faculty roles and responsibilities with the implementation of ISO 9000). Faculty were from all three schools and they were a mixture of more junior and senior members of the college.

Phase III:

There were 225 full-time faculty members at the time of the study, at St Lawrence College, on three campuses. It was anticipated that the total number of faculty to be

interviewed (full time, post-secondary only) would be between 15-25 (Approx. 10%), which is what it actually was.

The largest campus of St. Lawrence College, located in Kingston Ontario, has a significant percentage of the total faculty population. It was anticipated that the highest number of faculty interviewed would be from this campus. Faculty are assigned to the schools of Applied Arts; Business; Health Sciences; Human Studies; Engineering Technology and Trades. The researcher anticipated that there would be faculty referred for interview, from all representative schools. In actual fact there was reflective participation but it was disproportionately representative of the Cornwall campus.

Phase IV:

Once the data was analyzed from phase III, one group of faculty were identified, (discipline specific) who were actively engaged in the ISO 9000 process. This group was requested to participate in a focus group or second (interview) round, to discuss the ISO 9000 process improvement strategy and the implications from the department or divisional perspective.

Permission to Conduct the Study

Permission, from the senior Academic officers, to conduct a study was granted after initial presentation to the V.P.

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Academic and after the V.P.A. presented it to the quality council (January 13, 1997). Final permission to complete the research at St. Lawrence College was granted once the conditions of the ethics review process were completed at Michigan State University.

Access to the Participants

A letter of introduction, from the researcher (Appendix F), was sent to each prospective participant, with a reiteration of the details of the project. In the letter, participants were ensured that all responses would be treated with the utmost confidence. Included, with the introductory letter, was a letter of consent (appendix G), requesting their signature and asking for permission to audio tape the interview. This signed consent letter was returned to the researcher before commencing the interview.

Participants were assured that they would be free to withdraw from the study at any time or for any reason without penalty, and should they choose to do so, after participation in the interview, that their contribution would be destroyed by the researcher and not included in the study.

Confidentiality

The researcher maintained confidentiality, to the best of her ability. The identity of the college under study was

known but it was essential that the participants established trust in the researcher, to maintain confidentiality. Employing an alphanumeric identification for each respondent minimized respondent identification. Only the researcher's computer was used for interpretation of data and all files were kept in a safe place, away from the St. Lawrence College campus.

Every interaction with the participants modeled the maintenance of privacy so that trust and willingness to speak freely and openly were guaranteed. The researcher is not an employee of the College that was studied but this did not pose any unanticipated challenges to confidentiality. Once the data collection phase started, any faculty member, or decision maker who has been interviewed was encouraged to maintain a confidence with the researcher.

Every effort was made by the researcher to contact individuals by phone; mail or email and to maintain a low profile, when doing interviews. Informal discussions with participants, after the initial interview meetings, were kept at a minimum and the researcher exercised discretion. Interviews were held on campus, so as not to inconvenience any employee but an offer to move off campus, if any participant was concerned, was not exercised. An attempt was made by the researcher to obtain interview space in a

private room, or in individual faculty members' offices, to minimize distractions and interruptions and to maintain confidentiality.

Permission to tape-record all interviews was gained before the interviews. All but one interview was taped (as that one was done over the telephone) and fully transcribed by the researcher. Each participant was guaranteed that materials would be transcribed verbatim. Transcripts were **not** shared with any other member of St. Lawrence College and are being maintained by the researcher until successful defense of the research has been achieved or one year after UCRIHS approval. (Maximum, 3 years in total)

Interview format

The length of the interviews was between 60 and 90 minutes. The sequencing of the interviews was flexible, to allow for variations in individual schedules. St. Lawrence College has a "double X" time slot reserved on all faculty schedules. This time slot was designed to facilitate the scheduling of meetings and every Wednesday from 12:30-2:30 is reserved for possible meetings. The author did access this time slot for some of the semi-structured interviews. Participants' names were not recorded but a researcher code was used to identify the participant.

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An open-ended, free-flowing interview process was used, guided by informally stated versions of the following;

For Decision Makers:

1. How did the ISO 9000 process improvement initiative come to St. Lawrence College?
2. Why did the ISO 9000 initiative come to St. Lawrence College?
3. What were the anticipated changes with the implementation of the ISO 9000?
4. How would you define the "educative process"?
5. Were there any issues or concerns about faculty work (roles and responsibilities) that the ISO 9000 was anticipated to address?
6. How were faculty introduced to the ISO 9000 initiative?
7. What do faculty do or say that makes you think that they are engaged in the ISO 9000 process?
8. Could you identify specific faculty that you feel are actively engaged in the ISO 9000 initiative?
9. Why do you think that these faculty have chosen to be actively engaged in the ISO 9000?
10. Do you think that the work (roles and responsibilities) of the faculty have changed with the ISO 9000 process?
11. What do you think are the incentives or the reward that encourage faculty to participate in the ISO 9000 initiative?

For Faculty Members:

1. Could you tell me a little about yourself? How long have you been at St. Lawrence College? What

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were you doing prior to employment here and what subjects you currently teach?

2. How did the ISO 9000 process improvement initiative come to St. Lawrence College?
3. Why did the ISO 9000 initiative come to St. Lawrence College?
4. What were the anticipated changes with the implementation of ISO 9000?
5. Do you think that there were any faculty issues that the ISO 9000 was anticipated to address?
6. How were you introduced to the ISO 9000 initiative?
7. What do you do or say that would make someone think that you are engaged in the ISO 9000 process?
8. Overall, what means the most to you? Why did you become engaged with the ISO 9000?
9. What are the rewards or incentives for you to be engaged?
10. The ISO 9000 documents for the college state that you will address all "educative processes". What does this mean to you?
11. Have you seen the ISO 9000 document "quality institute: Application of the ISO 9000 to Educational Activity at St. Lawrence College? (Appendix E)
12. How do you think your work relates to this document?
13. Do you think that the ISO 9000 has changed the way that you do your work?
14. Has the ISO 9000 changed the way that you go about instructing your students?

15. Has the ISO 9000 changed the way that you grade students, maintain your student records or plan your classes?
16. Has the ISO 9000 changed the way that you advise, supervise or mentor your students?
17. Has the ISO 9000 changed the way that you redesign manuals/software, computer exercises or distance education courses?
18. Has the ISO 9000 changed your personal/professional development activities?
19. Are you doing anything that you feel is a direct result of the ISO 9000 that you were not doing prior to the implementation of the ISO 9000?
20. What do other faculty do or say that indicates to you that they are actively engaged in the ISO 9000 process?
21. Could you identify any faculty member that you feel is actively engaged in the ISO 9000?
22. Would you be willing to participate in a focus group discussion at a later date?

ISO 9000 Group Discussion

Questions for the group interview were developed more specifically after the initial faculty interviews were completed, but were reflective of the following:

1. ISO 9000 is supposed to affect the "educative process". What does this involve?
2. Has the ISO 9000 changed the way that you work with other faculty/administrators? If so, How?
3. Has the ISO 9000 changed the way that you work with other departments/divisions. If so, How?
4. Has the ISO 9000 changed the way that your department deals with issues of: instruction;

evaluation; or advising of students; curriculum design; or professional development? If so, how?

5. What particular tools/strategies/processes of the ISO 9000 have influenced the way that your department does its work? How?
6. What do you do or say that would indicate to others that your group is actively engaged in the ISO 9000 process?
7. What have been the gains and/or losses from the ISO 9000?
8. What are the incentives for the group to become engaged with the ISO 9000?

Analysis and Interpretation of Data

Analysis of data began with the first data collection point (review of appropriate college documents and first 4 interviews) and was an on-going process consistent with the principles of grounded theory. Data was used to discover theory that assisted the researcher with "predictions, explanations, interpretations and applications" (Glaser and Strauss 1997,1). The documents reviewed were used to corroborate information collected during the interviews and the observation.

After the audiotape of each interview was transcribed, the information was coded and a process of sifting and theme tagging was initiated (appendix K). This is consistent with grounded theory in Social research. (Glaser & Strauss 1977; Bogdan and Bicklen 1982; Merriam 1991; Lincoln and Guba 1985)

Chapter IV

Findings

"There is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new order of things"
(Niccolo Machiavelli, *the Prince*, translated by George Bull, Baltimore, Penguin Books, Originally published 1513)

Introduction

The purpose of this study was to identify, through qualitative analysis of interview data, faculty perceptions regarding changes in their roles and responsibilities with the implementation of the ISO 9000 process improvement strategy. In order to put interviewed faculty responses into perspective (concerning the ISO 9000 initiative) the author reviewed all relevant TQM (Total Quality Management) and ISO 9000 documentation archived at the host College.

Permission was received to review several information binders housed in the Vice President Academic's office and to wander through the college to review posted public documentation. The Registration area of the college was able to provide several pieces of information (college calendar, quality newsletter, etc.), and strategically

located notice boards throughout the college provided an opportunity to view ancillary documentation (photos, newsletters, announcements, awards etc.).

After extensive review of the college documentation and interviews with the four administrators, faculty were identified for interview, who were perceived to be engaged in the ISO 9000 initiative.

After the administrators and the faculty were interviewed, two focus groups were identified for possible inclusion in the interview process. The two focus groups were invited to participate in the process but only one of the groups responded favorably to the invitation. To maintain confidentiality of the focus group identity, the geographic location of this group will not be revealed.

Faculty identified, as "engaged" (and identified alphabetically, or by the letter "Z" if confidentiality was concerned) were not equally representative of all schools or campuses. There was, by percentage, a higher representation from the smaller campus of the college. This might be as a result of the industrial base of

Cornwall (St. Lawrence Colleges eastern most campus location) and the visible presence of the ISO 9000 in local industry. This was an unexpected finding. The researcher had hypothesized that the larger, main campus would be the hub of activity for the ISO 9000.

Faculty were representative of all three campuses but ranged in length of service from 8-27 years. There were 18 females in the interviewed group and 7 males. The administrative group was more evenly split at 2 men and 2 women.

The research was carried out in three phases. In order to interpret the responses of the faculty in the context of the ISO 9000 process improvement strategy, the researcher reviewed all ISO 9000 implementation and planning materials first. Administrators were interviewed followed by engaged faculty and then by the focus group.

The analysis of the data was a long process of sifting through the complete transcription of the interviews, and the college documentation. The transcriptions were reviewed in parallel with the field notes and as themes

emerged they were tagged and compared (see appendix K).

Any outlier comments were reviewed and included, if appropriate, and analyzed for their variance.

The Administrative Story

Document Review and Administrative Interviews

To gain a better understanding of the rationale for the change process at St. Lawrence College, the researcher prior to conducting any interviews, reviewed all available TQM/ISO 9000 college documentation, from 1992 on.

Information was found in the Academic Vice President's Quality Management Manual; Quality Manual; Policy Manual and the Quality Procedures Manual.

Anecdotal responses from the administrators, faculty and focus groups will be intermingled from here on, but identified as to origin, in the documentation of findings. It is anticipated that this will provide the reader with a richer, broader view of the data recorded.

Rationale and Implementation Plan for the Total Quality Management Initiative

The administrative rationale for considering a total quality management strategy, which preceded the ISO 9000,

was articulated in various documents. The tracking of the actual dates and significant key people, however, is vague. The binders are only semi-organized and they do not reflect a conscious attempt to archive the process or people involved. The actual interviewees were not much better at providing definite dates, as it was too long after the implementation of the process for the participants to be totally accurate.

To the best of the author's ability, the following time line has been reconstructed from the documentation reviewed (see table 4.1). The key dates and activities identified are supported within the documentation noted above and supported by the administrative and engaged faculty interviews. Fortunately the recollected history and the anecdotal responses regarding the rationale for the TQM and ISO 9000 process improvement strategy as well as the implementation plan were remarkably similar to the actual documentation found. (See table 4.1)

TQM First

The TQM initiative, the pre-cursor to the ISO 9000, is referenced as early as 1992. The common understanding

within the staff, and reinforced during the faculty interviews, is that the quality initiative came with the new college president (1992).

The new President, coming from business, brought his vision. (He) started by implementing total quality as a philosophical foundation but I am not sure that he had anticipated moving on to ISO 9000. (Focus group)

TQ (total quality) came first, for sure, with the college president. A couple of years after that, we got on to the ISO (9000 Initiative). (Engaged faculty, M)

Table 4.1: TQM/ISO Implementation Timeline

- 1992 - conscious decision to pursue TQM (launch of the TQM initiative)
- First reference of TQM initiative
- 1993 - raising awareness of TQM within the institution
- Appointment of a quality facilitator
 - Appointment of a steering committee
 - Creating a quality policy
 - Development of an implementation model
 - Training plan for all employees
 - Identification of projects that would likely succeed
 - Identification of trainers
 - Development of baseline information
 - Communication strategy
- (The 1993 sequence is not listed in any particular order; it remains a summary of all initiatives of that year)
- 1994 - quest for ISO started
- Visit to several sites
 - Review of the literature
- 1995 - ISO 9000 first endorsed (February)
- Staff orientation/training
 - Implementation of ISO 9000
- 1996 - ISO 9000 certified (June)

Rationale for TQM

The TQM steering committee (a cross-divisional team, Appendix H) articulated the rationale for the TQM initiative. TQM was deemed essential "to change the way that business was done at St. Lawrence College," (TQM manual, 1992) the steering committee noted that:

The public agenda was demanding more accountability; there was an increasing expectation to do "more with less"; the status quo was no longer being tolerated; the public had options to choose from and there was a change in the demographics and expectations of their students. (Administrative binder, 1992-3)

This was also supported by the following comments made during the administrative interviews:

(Our) Board members were from the private sector. They had an understanding of quality systems. In their discussions, we were caught up in this issue about using quality as a change vehicle. (Administrative interview, participant C)

I think there was a sense that we needed to have better ways of working on problems. (Administrative interview, Participant A)

There was a major gap between St. Lawrence College's internal perception of quality and the perception of quality in the community. (Administrative interview, Participant Z)

We were looking for something to help us move forward our quality improvement model. (Administrative Interview, participant D)

A three-stage implementation plan for the total quality initiative was articulated and recorded in the appendix of the implementation binder. (1993 see table 4.2)

TQM Communication Plan

A communication strategy was also articulated in the 1993 implementation binder. All the following strategies would be used to insure members of the college community were informed about the Total Quality initiative: "bulletin boards; newsletters; posters; flyers; department meetings; brown bag sessions; and electronic mail" (Implementation binder, 1993).

Table 4.2: TQM Implementation Plan

Phase one: raising of awareness

- appointment of a quality facilitator
- appointment of a steering committee (appendix H)
- development of a Quality council (appendix I)
- creating a quality policy (appendix J)
- development of an implementation model
- identifying a general training plan for all employees (Implementation binder, 1993)

Phase two: identified projects that would be most likely to succeed

- appointed and trained the first group of facilitators
- identified work and team projects (implementation binder, 1993).

Phase three: identified key processes for developing baseline information; tracking methods and reporting formats.

(Implementation Binder, St. Lawrence College, 1993)

Expectations of the Quality Initiative

Mintzberg (1993) and Thor (1993) warn us "professional work cannot be controlled, like any other, in a top-down manner" and that "complex work processes cannot be formalized by rules and regulations." The St. Lawrence College administrators appeared determined to move forward with the quality initiative. Thor also warns us that there are many barriers to TQM in higher education. He states that TQM "pushes decision making down; there is resistance to change in higher education; there is a reluctance to think of and to treat students as customers and that TQM is often associated with downsizing and is training intensive." (1)

The Implementation Binder noted that the senior academic officers expected the quality initiative to "streamline the college bureaucracy; increase efficiency; see more interdepartmental/intercampus sharing; ensure a focus on customer service; raise the college profile in the community and that St. Lawrence College was expected to become the college of choice" (1992), for students in the post-secondary sector.

No specific documentation was found that would indicate management consciously implemented the TQM process to deal with specific issues or concerns regarding faculty work. Many of the articulated administrative goals, however, are linked to faculty specific roles and responsibilities:

There were inconsistencies in performance and you can't address those if you haven't set some standards.
(Administrative interview, participant B)

I expect to see: up to date course outlines for all course offerings; to see that suitable teaching materials were available for all courses; to see teachers using appropriate methods; that faculty would attend classes punctually; that faculty would maintain records of work done including methods of delivery; that faculty would maintain a complete and up to date register of all courses; (that) faculty (would) set, mark and maintain student records; (that faculty would) attend team meetings; produce reports of student progress; (attend) faculty professionally development sessions; and follow the system processes. (VP Academic -- Implementation Binder, 1996)

I wanted them to take more of what I call a customer focused approach to students in the classroom.
(Administrative interview, participant C)

Problems with TQM

Extensive planning and an implementation strategy for the TQM did not seem to get the results that the academic managers expected. The administrators, when interviewed stated:

There was nothing on paper. We really had not improved a lot of our processes. For us, TQM was a philosophy; it had an impact on our culture. We learned some tools, we had some teams, we learned to work in a team environment or began that process, but we needed something that framed and supported the TQM initiative. (Administrator interview, participant B)

TQM did not build in the same message, of measures and standards and procedures (that we expected). (Administrative interview, participant C)

We were looking of something to help us move forward our quality movement. (Administrative interview, Participant B)

TQM in St. Lawrence College did not seem to be accomplishing what the administration had hoped it would. Mintzberg, in his discussion of professional bureaucracies presents another perspective that might explain the situation at St. Lawrence College: "Change in the professional bureaucracy does not sweep in from new administrators taking office to announce major reform, rather change sweeps in by the slow process of changing the professionals" (213). This is also supported by Rogers (1995) when he states "most people depend mainly upon a subjective evaluation of an innovation that is conveyed to them from other individuals like themselves who have previously adopted the innovation" (18)

Other literature supports the idea that this type of imposed change strategy, TQM/ISO, does not integrate well into the educational environment (Birnbaum, 1989) By 1994 the administrative team had realized that the TQM initiative may not be enough to sustain the quality improvement that had been hoped for:

We needed to have a prop, a kind of tangible prop for the whole TQM movement. (We needed) something that framed and supported the TQM initiative. Administrative interview, participant B)

We felt that we needed a framework, that roadmap, and that we were looking to it as an external standard. (Administrative interview, participant A)

ISO became a way of not only keeping the momentum going but also a way to shore up and to move forward on a very holistic basis. (Administrative interview, participant C)

I think the reason ISO was chosen could partly relate to how it fit with the T.Q. process. With the tools of the quality initiative it would be easy for us to describe our processes. (Administrative interview, Participant A)

Search for a Solution (ISO 9000)

After an extensive search of options to support the TQM initiative, ISO 9000 became a focus of the management team, even though it had not been the recommendation of their change management consultant (as stated in the administrative binder). The administrators felt that the

ISO 9000 could provide the framework to shore up the quality initiative. A search was then started to find benchmark colleges that could assist St. Lawrence in its quest to become ISO 9000 certified. (Implementation binder 1994)

Let's look and see who else has done it (ISO 9000). We discovered Sandwell College (England) had become (ISO certified) and I cannot remember how that came about. The president might know more about that, I think we did some research and looked at the (inter) net. (Administrative interview, participant D)

I understand that there was some university in California, and there is also one, I think, in North Carolina, I have a list (if you want to see). (administrative interview, participant A)

I stopped over in England and visited with Sandwell College. I spent the day. I walked away absolutely convinced you could take ISO and apply it to an educational institution. What is more important, you could apply it to your core business. (Administrative interview, participant C)

ISO 9000 at St. Lawrence College

When the administrators were asked how the ISO 9000 came to the college, there was unanimous agreement that it had been a direct result of the vision of the new college president:

It (all) started with the total quality movement: in fact, ISO was not even mentioned. Maybe the first two years. After the President arrived. (Administrative interview, participant A)

It was (the) second piece of a model that happened about five years ago, just after the President arrived. We decided that we wanted to look at a model of management that was more empowering. So the college adopted a program that was out of the US. (ISO 9000) (Administrative interview, participant B)

We looked at measurable standards that were world-wide recognized. That's why we moved to ISO 9000. We were already suppliers of federal contracts and we knew the federal government was moving toward having their suppliers ISO registered and certified. (Administrative interview, participant B)

ISO 9000 Implementation Process

By early 1995, the ISO 9000 had been endorsed as the change management process for St. Lawrence College. An implementation plan was articulated and a marketing strategy of "town hall meetings; divisional orientation meetings; advertisements and notices" (Implementation binder 1995) seemed to be pervasive. The administrators stated that:

We set up a communication strategy. We put together a slide presentation and actually had sessions on the campus. (We) told everybody about what ISO 9000 meant. We had training sessions with the school directors. (Administrative interview, participant B)

We talked about it. We provided forums; information sessions (and) we attached information to the paychecks. (Administrative interview, participant B)

We had a lot of upfront training and orientation sessions. We trained people in the internal audit process and recruited faculty to be internal auditors. (Administrative interview, participant C)

We had a newsletter, an ISO 9000 newsletter, which was putout every second week. It kept people informed of what we were doing, how we were doing and how far advanced we were. (Administrative interview, participant D)

The college was bombarded internally with information about the ISO 9000 initiative. Senior academic officers began to articulate what they anticipated would be measurable outcomes of the process.

Role of Faculty Union

The faculty union played a unique and somewhat unprecedented role in the implementation phase of this strategic initiative. The faculty union appeared to play a very strong supportive role at the most critical phase of the implementation. The new college President had approached the Faculty Union President looking for support and endorsement of the project. The Union President complied. It may have been a coincidence but the Union President was a strong supporter and very knowledgeable

We had a common interest in quality. (Administrative Interview Participant B)

I do industrial training in quality: (administrative interview Participant Z)

The college President requested, and was provided, an opportunity to explain his position to the Union. He then requested nominations for participants on a Quality Steering committee and the Faculty Union President accepted a position on this committee. There was as a result, obvious high-level union support from the inception of the idea. This was probably one of the most significant factors in gaining support from the faculty.

Anticipated Faculty Outcomes

During the initial stage of ISO 9000 implementation, academic managers articulated that all faculty would be expected to demonstrate the following measurable outcomes (as noted in the administrative binders, see table 4.3).

This was reinforced during the administrative interviews:

I think we did expect to see a whole lot more useful data that would allow us to improve. That we would have a more planned and organized approach to collect data about our customers. We didn't really collect this information before. (Administrative interview, Participant B)

I see a fundamental philosophical change. Everyone is accountable and must demonstrate that accountability. (Administrative interview, participant C)

Anticipating change in the business was also reflected in the interviews with the administrators:

We expected to pay a whole lot more attention to the teaching and learning process. (Administrative interview, participant C)

(We) expected the same course outlines. It was expected (that) everybody would do a program self-audit. (Administrative interview, participant B)

Table 4.3: Measurable Outcomes for Faculty

- course outlines that followed the format that was approved by the director
- evidence of preparation; objectives and a topical outline
- evidence of classroom preparation and a record of faculty work to date
- posted office hours
- student attendance records; tests; assignments, and records of grades and assignments
- maintain significant data/records on "at risk students
- student advisement forms; course feedback forms, with recommendations and corrective actions taken
- student success data; reasons for failure; program review and professional training records

(administrative binder)

The ISO 9000 was an administration initiated change process. However, the success of this process was going to depend on faculty acceptance and participation. The focus of this study was to investigate how certain faculty gained that understanding and became engaged in the ISO 9000 and perceived any changes that may have occurred in their roles and responsibilities.

The Faculty Story: Introduction

No preconceived ideas of changed roles and responsibilities were identified at the outset of this study. Change may have occurred in the roles or responsibilities of faculty with the implementation of the process improvement strategy but it was unclear how extensive these changes might be. It was anticipated by the researcher and by the nature of the ISO 9000 that something should have changed. To what extent, and in what ways, the ISO 9000 initiative intended to affect faculty roles and responsibilities was the first question to be answered.

Intended Changes, a Faculty Perspective: Question One

Faculty who were perceived to be engaged in the ISO 9000 initiative were interviewed individually and then one small group of previously interviewed faculty agreed to participate in a focus group discussion. Because there was only one focus group in the study, anecdotal responses from that group were integrated into the responses of the individual faculty interviews.

A strong message had been given to the new college president by the board of directors that change was necessary. Increasing accountability and the need to respond to the public expectation of quality was a driving force for the college president.

The president had an expectation that changes would occur and that the idea of continuous quality improvement was going to become an integral part of all staff behavior. When it did not seem obvious that change was going to happen with the TQM initiative, the ISO 9000 initiative was implemented. Staff would be held accountable for complying with the minimal articulated standards and to demonstrating continuous quality management principles (use of TQ tools and processes), identified through the internal ISO 9000 audit process.

As stated during the administrative interviews, staff in particular faculty, would be expected to demonstrate that they were complying with the quality standards and using the tools.

We looked at measurable standards that were world- wide
ecognized. That's why we moved to ISO 9000.
Administrative interview, participant B)

You build your processes so that you do not do a check
at the end of the line. (focus group)

To hold people accountable. (Engaged faculty, J and P)

On the other hand, some of the interviewed faculty saw the
implementation of the ISO 9000 as a generic attempt at
standardization and not quality enhancement. Many (n=5)
also believed the ISO 9000 was intended to address
inconsistencies of other faculty, but not themselves:

I think consistency. (I thing that) I was doing fine,
but maybe somebody else was not or some department was
not (engaged faculty, D)

It's just the idea that everybody is following the
same guidelines. (Everyone had) to come to the same
results or similar results. (Engaged faculty, S)

That they (faculty) could come together with some of
these things. (Faculty were) encouraged to come
together and get consensus around, say, what is in a
communications 100 course (introductory communications
course) outline, no matter which campus (they
represented). (focus group)

It made people automatically do, (what they were
expected to do) to comply with a standard. (It was)
not about being judged" (engaged faculty, Q)

Improvement in the communication between campuses and
consensus around delivery. (Engaged faculty, H)

Several (n=7) interviewed faculty were convinced that the primary goal of the ISO was to address students' perceived issues of transferability between campuses and the inconsistencies between courses at these various campuses:

We are a tri-campus. We really needed a system that would allow us to have some sense of confidence in what was being done on other campuses. Many students transfer from one campus to another and that was a great help (Consistent course outlines). It sort of set in processes, ways of managing paper and so forth that was much more reliable" (focus group)

(It was) an effort to try to get the three campuses to behave as one. (Engaged faculty, G)

Students could more easily transfer from one college to another. There were more standards (expected) now. (Engaged faculty, A)

It was noteworthy, that five interviewed faculty perceived another possible reason for implementation of the ISO 9000, although it was not clearly identified by the administrators. They thought that the ISO 9000 might just be an exercise to reestablish an identity for the college and to insure credibility in the public domain:

I think in terms of marketing, promotion image, in finding a niche for this little, you know, little college that's going to make us stand up like the best little college in Texas. (Engaged faculty, F)

It would enhance the college's credibility as a quality institute. (focus group)

We expected to become a "college of choice" that was to have an impact on the bottom line. (We expected) to ensure that the enrollment of the college was sufficient for the funding formulas. The ISO was directly related to ensuring that was part of it. We had an edge locally but (we wanted it to be) more regionally and internationally. The intent was to be the first and to reap the benefits of being the first. (focus group)

I think that they (administrators) were anticipating that they would get a niche that nobody else had. That it would be a first. That they (administrators) could say that they had done it. (Engaged faculty, T)

There seemed to be a conscious effort on behalf of the administrators to focus on the external needs of the public, with their demands for accountability and quality, as well as with the expectation that faculty performance would naturally improve as a spin off of the ISO 9000 implementation. The senior academic officers had articulated specific quality indicators (course outlines, audit expectations et). But faculty seemed to be focused on the generic results.

A few of the faculty did speak about what might be deemed faculty work, and these comments were congruent with the administrative expectations. Generally, the faculty respondents did not see the expectations of the ISO 9000 initiative in any way challenging to their classroom

autonomy. They did not seem to think that the ISO 9000 was in any way threatening or problematic:

I know that they (administrators) expected the same course outlines; they expected everybody to do a program self audit. They expected people to be in program teams. (focus group)

(Administration) expected a transition to standardized course outlines and to learning outcomes. (Engaged faculty, R)

I expect to collect more feedback. To try to find out what our students are getting and to know how we are defining what they were getting. (Engaged faculty, U)

The focus group faculty appeared to believe that the ISO 9000 was a management driven process improvement strategy that was spearheaded by the college president. The focus group faculty did not seem convinced that it had anything to do with general performance in the classroom:

The president saw (that) it was a way to separate us, to move us forward in a different direction and this came directly out of his (own) experience with it. He made the decision that it (Total Quality) would have good application (to the college) and once that happened the ISO came out of it. I think (it was a) natural evolution. (focus group)

However, one member of the focus group and another interviewed faculty member were somewhat skeptical and not convinced.

When I look at it from my perspective this initiative was driven by senior academic managers. They were

looking at targeting everything concerning faculty roles. (Engaged faculty, S)

I thought that they were looking for what I did wrong. Certainly it made me look at everything that I did. To make sure I was doing it right, (and for) what I could improve. (Engaged faculty, U)

Summary

The anticipated outcomes or expected changes in the roles and responsibilities of faculty, with the implementation of the ISO 9000, is interesting to look at from both the administrator and the faculty perspectives. The administrator's anecdotal responses supported the documentation found in the implementation and policy binders, and they were significantly focused on a few areas.

There was a definite expectation that the business of the college would function in a more efficient manner and that there would be a focus on the customer. This was expected to manifest itself in greater congruence between the college program documentation (course outlines etc.) and in improved interdepartmental/inter campus sharing.

An improved public perception of the college was also a desired outcome after marketing the ISO 9000 certification within the local community. There was an implied expectation that this would move the college toward the anticipated goal of "becoming the college of choice".

The senior academic officers articulated expectations regarding faculty accountability in their work. Specific changes from faculty were not highlighted by it was very clear that the administrators expected faculty to be able to demonstrate several things. This included course outlines, lesson plans, evaluation strategies, etc. if asked or with a program audit.

Faculty participants were not as specific in identifying anticipated outcomes with the ISO 9000. Most interviewed faculty were quick to identify the needs of students and the community with the ISO 9000 but very few identified specific faculty expectations.

Improved communication between the different campuses, congruence with course outlines and improved college profile within the community were quickly identified as

anticipated outcomes. Interviewed faculty were also quick to imply that they felt that the ISO 9000 and the TQM processes were important initiatives in the college but gave the impression that it was for improving performance in others and not necessarily in themselves.

Engaged Faculty and the ISO

Research Question 2: What does engagement look like?

Faculty, identified as being engaged in the ISO 9000 process, were interviewed in the second phase of the research project. The participants in the research project who were asked to describe the behaviors or criteria that would indicate to them that faculty who appeared to be engaged in the ISO 9000 initiative identified them. Faculty leading the audit process of ISO were the most readily identified as being engaged:

They would be on one of the improvement teams, usually as an auditor. (Administrative interview, participant C)

I am sure, partly because I am an auditor. (Engaged faculty, D)

I was an auditor. (Engaged faculty, U)

Faculty who commonly used the TQM tools and/or demonstrated a familiarity with the ISO 9000 processes were also identified as being engaged in the ISO 9000:

They use those tools with their students. To collect information. And I think what is more important as the students work on projects then they teach the process improvement skills, like brainstorming.
(Administrative interview, participant A)

Incorporated and actively used the ideas and processes of ISO. (focus group)

Although none of the above were guarantees that the participants were truly engaged in the ISO 9000, the impression from the individuals in the first round of interviews was that this was at least minimal evidence to endorse the perception of being engaged.

Participation in the mandatory training sessions on the use of the ISO 9000 processes was another way that faculty felt demonstrated how other engaged faculty had become involved:

There was a specific training period for everyone. They (engaged faculty) would have a better grasp of it and that again created a lot of background reading.
(Engaged faculty, G)

We willingly went through the 40-hour course. There were reports of having learned a lot and enjoying it and so forth, did not hurt either. (focus group)

We went beyond the required training, (We had) several days of ISO training to become an auditor. (Engaged faculty, H)

Taking the TQM/ISO training. (Engaged faculty, D)

Why interviewed faculty chose to be engaged.

Some of the interviewed faculty indicated that they had to try things, or actively experiment with the tools and processes, before they could commit to them.

We got to use the forms. Let's figure out a way that we can do that (so that it) isn't going to be ridiculous for you but allows us to sort of work it out. So we used the tools on a regular faculty meeting. (focus group)

We were one of the first teams to introduce it in the classroom. (focus group)

Other interviewed faculty seemed to be more intrinsically motivated to become engaged. They indicated that they just "needed to know" and went about actively searching out the knowledge required to answer their question:

I just wanted to see other faculty, to watch them do their teaching. I have a natural curiosity. (Engaged faculty, H)

I asked a lot of questions about it. Through challenging and questioning, I showed an interest in the process. I am interested. (Engaged faculty, G)

I talked to the president. (Engaged faculty, S)

I am interested in learning more and having a better understanding. (Engaged faculty, X)

I just wanted to take a look at what others were doing. (Engaged faculty, G)

Personality and attitude also indicated to some of the administrators and to other faculty that being engaged was just part of the person:

I think I was just very positive about the whole thing and I did try and encourage my colleagues at the time to embrace the ISO. I was keen to be involved in these things. (Engaged faculty, O)

I had just gotten to a stage in my life where I was keen to be involved. I had done the educational thing. I wanted to do the leadership thing. (Engaged faculty, M)

We have never indicated in any way that it is not a good thing, or that we would not be participating or that we were not endorsing the idea. (focus group)

Demonstrated Engagement

Faculty "engaged" in the ISO 9000 initiative in various ways. They became auditors, trainers, or demonstrated use of the TQM tools in their classroom or in faculty meetings. They demonstrated active participation, a sense of inquiry and a willingness to ask questions to gain insight. These activities all contributed to the

enhancement of knowledge and probably contributed to their willingness to become engaged in the ISO 9000.

It seems that the more faculty participated, demonstrated knowledge and took on the responsibility of certain ISO 9000 tasks, the more likely that the administrators and other faculty were to identify them as being engaged.

Research Question 3: Why did faculty engage in the ISO 9000?

The ISO 9000 initiative was an effort, at least in part, to get faculty to behave differently, as directed by administration. Mintzberg argues that this is not always easy, as faculty do not always respond favorably to top-down decision making of senior academic managers. Faculty who were perceived to be engaged demonstrated this engaged behavior in a variety of ways, but one is never sure if it is just "formal compliance" (ODR/IBM 1999) or truly engagement.

Administrative participants could not articulate specific reasons for some faculty's engagement, but they speculated

that they (faculty) needed to be involved or it was just part of who they were:

It's just something that's innate in their being, they like it and they latch onto it. (Administrative interview, participant C)

Some people can't figure out why they do it, (but) they do it anyway. They go whole hog and they commit themselves to whatever happens to come. (Administrative interview, participant C)

For some of them, when we started documenting procedures and started doing audits, I noticed that several of these people were (involved in the) auditing. (Administrative interview, participant B)

Faculty, on the other hand, articulated many reasons for becoming engaged in the ISO 9000 initiative. Some faculty indicated that the ISO 9000 was a good fit with their preferred work style. Some said it provided them with the consistency that they needed or wanted:

It really did appeal to the way I work and operate. (Engaged faculty, M)

We would all behave in a consistent way. So that there wouldn't ever be fuzzy areas anymore. (Engaged faculty, V) There wouldn't ever be gray areas anymore. (Engaged faculty, M)

The consistency, everything would be clear-cut. I'm a rule follower so that really appeals to me. A more accountable structure really did appeal to me. (Engaged faculty, N)

What appealed to me most was the idea that we would all behave in a consistent way. There would not ever be gray areas anymore. You can transfer from one

campus to another for example in the business program and be able to carry your credits or everybody in the same program would give the same types of learning outcomes to students. (focus group)

Other faculty comments support the idea of accountability.

By this, they seemed to mean that they wanted other faculty to take responsibility for their actions, or to be accountable for their actions:

There are people carrying their load and people who don't carry their load. Leveling and the accountability for sure were important. (Engaged faculty, H)

Accountability model. If there are things, (or) systems that we can put in place that can ensure that our clients; our customers; and our students are really getting what they came here for. It makes me feel good to think that there will be things in place so that those other people can't get away with what they've always gotten away with. (focus group, engaged faculty, F)

It's about time we were professionals. We've always considered ourselves professionals, and it's about time that as a college we started demanding professionalism of everybody, because what other people do reflects on all of us. (focus group)

Many faculty initially saw the process as a learning opportunity. Once they gained a better understanding of what was involved in the ISO 9000 process, they were more willing to become engaged. This supports O'Connor's "Theory of Commitment Model" (29). In his model, gaining

an awareness of change and understanding that change helps in the development of a positive perception of that change and may lead to internalization and adoption more easily.

Various faculty members voiced related ideas:

I just wanted to make sure I was up to date and I figured this would be a good way to do it. I don't want to be behind. If this is the game we're in, I want to make sure I'm on top of it. (Engaged faculty, D and Q)

When I audit faculty, (I learn great ideas of theirs), you know, neat things that people do in a classroom. I've enjoyed that part of it. (Engaged faculty, C)

I needed to know what was going on. I wanted to be part of it; I wanted to see what I can, you know, whether it's useful. (focus group, Engaged faculty, C)

The need to satisfy an ongoing personal curiosity, an individual learning need, or to learn new ways of processing things was perceived to be strong intrinsic incentive:

Better teaching, that's number one. I want to use the tools as my vehicle, for continuous improvement. (Engaged faculty, E)

I learned (a) lot of interesting things about how other people manage their courses and how they deal with day-to-day problems and of course every department's unique. It was wonderful. (focus group, and engaged faculty H)

Ensuring that there was compatibility between the philosophy of ISO 9000 and their own personal working styles was important to other faculty:

It meshes with my work style. I like things pretty structured and organized. I like a flow. I like a reason behind something; everything's down on paper. It's clear. There is a flow. (focus group, and Engaged faculty E, R)

It really did appeal to the way I work and operate. (Engaged faculty, H and S)

(My) personal comfort with the issue of accountability. I see that somebody checks (other faculty). That (it) is benefiting the students. (Engaged faculty, E)

It's a natural fit in terms of those things. It's nice in the classrooms. (It's nice) for the students and everyone to be able to sort of see what our ground rules are. (focus group)

Rebuilding a sense of community and pride, although difficult to measure, was also noted. This seemed to be in direct response to the faculty perception that the external customer was very important, and supported the primary goal that the faculty had perceived; namely credibility in the public view:

It (ISO) built pride back into the organization, and people feel good about it. (Engaged faculty, A)

I'm very proud that the college has ISO certification. I have a real sense of accomplishment. (Engaged faculty, D and N)

It (ISO) gave them a sense of "wow" and you know I think that we have a tendency to see only within the confines of our own work. (Engaged faculty, F and O)

Externally, there is a public perception about us. People in the community are saying, Gee, St. Lawrence College is really making a difference. (St. Lawrence) It's doing (great) things now. (focus group)

Faculty sometimes, just liked to be involved and expressed it in the following statements:

I like to be involved. I enjoy being involved, by moving out into the other areas and doing the auditing or being involved with some of these things, that's personally satisfying. (Engaged faculty, C)

I was being asked to do a lot of things and I thought, yes it was kind of an ego trip, and it did match my own personal ideals. And then when I was doing the auditing I got to see the inner workings of departments that I hadn't seen before. It was wonderful; to see different ways people are doing things. You can then bring them back to your environment and possibly implement them or modify them to make your own areas better. (Engaged faculty, H)

The faculty noted many intangible gains. Personal pride, a sense of accomplishment, involvement and compatibility with their preferred working style were frequent comments. Because of the frequency faculty noted that intrinsic incentives, it suggests that they may play a greater role than do any extrinsic rewards. This supports Baldwin's (1985) research on faculty vitality.

The researcher anticipated extrinsic incentives but faculty voiced them infrequently. Workload issues were not mentioned at all, and working conditions, career opportunities or tangible rewards were only briefly mentioned:

Being an auditor is a recordable experience, a transferable skill, if I needed it I could take it to the outside world. I could add it to my skills (list) within the college. (Engaged faculty, G and N)

I did get a trip to the East Coast. It was something that I didn't really expect. (Engaged faculty, Z)

\$10,000 was allocated to create a learning environment that we wanted. (Engaged faculty, P)

There is a total quality reward program, so there were faculty that had been recognized who were publicly given their rewards. Their pictures are taken and published. (focus group, T)

After speaking with the faculty, I believe that the ISO 9000 initiative was never intended to set tangible rewards as the expected norm. No financial incentives were ever spoken of in the planning or implementation phase. I also believe that the faculty who were perceived to be engaged knew from the beginning that tangible rewards would not be forthcoming. The faculty who are participating actively in this initiative do so even though there seems to be

little tangible reward. I cannot, however, see this as an issue as all faculty who were interviewed seemed genuinely interested and committed to the ISO 9000. This may, however, be a reason that other faculty did not choose to become engaged in the ISO 9000.

Intrinsic/internal rewards, whatever they were for the individual, seemed to satisfy the interviewed faculty because they did not voice any concerns. Faculty who are perceived as being "engaged" in the organizational change at St. Lawrence College apparently did not voice a need for tangible rewards as incentives.

Research question 4: What if any, are the changes?

The ISO 9000 process improvement strategy implemented at St. Lawrence College was a stimulus for change. The senior academic officers spent considerable time and financial resources articulating the standards that faculty would respond to in the ISO 9000 certification process.

From the faculty perspective, as articulated in the interviews, change did occur. What remained unclear was how much the change directly affected faculty roles and

responsibilities, if at all. Braskamp and Ory's (1994) classification of faculty work was used to develop the questions for this component of the research study, but the author also kept in mind the description of faculty work, as articulated in the colleges' collective bargaining agreement. (Faculty Union Handbook, 1997)

Prior to asking questions regarding the perceived change in their specific roles and responsibilities, the engaged faculty were asked if they thought that the way they do their work had changed with the ISO 9000. Most faculty were not convinced that their roles or responsibilities had changed:

No, because I always operated in a very rigid way and this is a rigid model. It's clearly defined; I like to know where I stand. (focus group, engaged faculty H)

I don't think that I've had a dramatic change in what I do; it might have made me organize my files better. case you're audited. (Engaged faculty, P)

My first reaction, no. (Engaged faculty, F)

With further probing, the faculty did feel that change had occurred but it was not felt to be significant. One faculty member felt that a great deal of the perceived

change was the result of diligent support staff who hounded the faculty members to complete their forms and requirements of ISO 9000:

Our secretaries are very good about filling in the forms and asking us if pieces are missing. I'm not sure how much of it is we are complying because we are being asked for additional pieces of information, which is fine. Other people have different jobs to make our jobs easier to be compliant. (Engaged faculty, F)

This poses an interesting perception. The administrators perceive the faculty to be engaged, but at least one faculty member believes that they look "engaged" because of good support staff. Mintzberg states, "given the high cost of professionals, it makes sense to back them up with as much support as possible, to aid them and have others do whatever routine work can be formalized." (194) Faculty work may simply have been done by support staff, which creates the perception of engagement.

Braskamp and Ory's (1994) classification of faculty work identified teaching; research and creative activity; practice and professional service, and citizenship as the mainstays of faculty work. Faculty were questioned more specifically about their teaching and professional development, (their primary area of work at the community

college), in order to uncover further changes that may have occurred with the ISO 9000 initiative.

ISO 9000 and its Effect on Teaching

Almost all the faculty interviewed felt that the ISO 9000 had very little influence on their day-to-day teaching or on their curriculum:

The actual teaching? No, I won't say that I'm approaching my students differently. (Engaged faculty, N)

No, I think that the actual classroom meeting between teachers and the students is the same. (focus group, D)

For some teachers it makes absolutely no difference (be)cause they've always done it that way. (focus group)

One faculty member, however, did feel that the curriculum and the way that he was teaching his students had changed. He felt that the students had better knowledge of TQM techniques because they had to take a TQM general education class as part of their core requirements in the program. This allowed him an opportunity to integrate TQM into his curriculum:

I've certainly implemented TQM processes in the classroom, and it's made a difference in how I

structure group work or problem solving sessions.
(Engaged faculty, C)

Other faculty supported a less tangible outcome of the ISO 9000: improved communication. Several faculty voiced a strong feeling that improved communication between the students and the faculty was a result:

Much more accountability around and clarity in communicating what's expected. (focus group)

It's been much clearer for students (since ISO) and it's also reduced faculty frustration. I (used to) get all the complaints at the end of the semester when students are questioning marks and it's often because things weren't clearly communicated at the time. They didn't realize this. (engaged faculty, C and L)

The most significant change, according to those faculty interviewed, was that all courses had to have a comprehensive course outline. Faculty participated in a collaborative process to ensure that all three locations of the campus were consolidating information and developing consistent course requirements. Faculty felt that this was definitely better for all students and for themselves:

Some of the changes that I've seen, in particular, as a coordinator, (and) the most pragmatic and significant one's (are) around course outlines.
(Engaged faculty, T)

Like getting assignments in writing and having deadlines stipulated and having your grading policy, I think that's been really positive and its forced teachers to be much more precise. (focus group, engaged faculty, C)

Things like syllabi or course outlines have definitely been influenced by the ISO initiative. (Engaged faculty, U)

Changes to teaching practice, curriculum design, lesson planning, content delivery, or teaching strategies were not mentioned by any of the faculty. I think that the faculty saw the ISO 9000 as having minimal influence in the teaching arena. They felt that it played a greater role in the establishment of processes that would help them largely with the administrative side of teaching.

All faculty interviewed felt that the ISO 9000 played a significant role in student evaluation. Test design, evaluation strategies and issues of cheating or academic dishonesty were not identified, but students at risk and program evaluation were.

Students at Risk

Any student who was identified as being at risk (poor attendance, failing grades) was tracked more efficiently

due to a new form (F17). Most faculty quickly identified the F17 form, which was to be used with students at risk. They felt that this was a positive strategy for early detection of students at risk, and for assisting with possible interventions. There was an element of shared accountability between the faculty, administration and the student. The ISO was felt to provide some formal structure to a necessary process:

We now have an advisement form (F17), if they fail a test. (Engaged faculty, H and R)

Some faculty used to write letters. As a coordinator, quite often we would get a copy of the letter, now we get a copy of the F17 and we get lists of students and how they're doing in different courses. It's a way of formalizing (so) the student can't come back and say, "Well I didn't know I was failing this course; Now they have a course of action; this is what the problem is, this is what I recommend. (Engaged faculty, H).

Before ISO came I was asked to keep track of students, and to ask the faculty what their course of action was going to be. It was very informal, so there was no accountability. I'd say, well, did you follow up with that and they'd say yes. I'm not their boss so now the student is obligated as well to follow up with the faculty member around that articulated agreement" (focus group, Engaged faculty H)

I think that it made it easier for me to help them establish what's (a) reasonable expectation, because there's ways for them to give feedback. (Engaged faculty, F)

There seemed to be a conscious effort, on the part of the interviewed faculty to comply with the identification process of the "at risk students." One of the ISO initiatives had been to develop a form (F17) that all faculty completed, to facilitate the identification and monitoring of students who demonstrated academic difficulty. There was consensus, among the interviewed faculty, that this was a positive and important role for faculty to participate in, and that it was a new role for faculty:

I would never fail a student today without letting them know almost for months. It's more formalized. On an at risk form. If they're in severe jeopardy, they go on the advisement form. (I) Communicate that issue to the student. (It's) standardized across the college. (engaged faculty, G)

Yes, the students at risk. We have to document feedback. Again, we always got feedback from our students, but now we have to document that feedback and then show what we did with that particular feedback. (focus group, engaged faculty, E and T)

Ontario college faculty are not required to have a teaching certificate or any formal training in psychometrics or curriculum design prior to employment. Many faculty do the best that they can, until something/someone shows them differently. Never the less,

evaluation may be one of the faculty responsibilities that is most important to students.

Student Record Keeping

Accuracy and clarity of expectations was clearly identified by the faculty as an essential component of their job and they were quick to identify what the ISO had done in this domain.

Maybe, more accurate recording, more students are clear on what's expected. (Engaged faculty, P)

More accountability around how evaluation is done. (Engaged faculty, C)

I think so, although I had a process in place it certainly has formalized it (evaluation) a little better. (focus group)

Clarification again around what constitutes an A or a B. (Engaged faculty, D and V)

As the number of years that they have been teaching increases, faculty often found that the management of years of student data becomes cumbersome. The ISO process has facilitated the articulation of a "statute of limitations" for grades and student documents. It has also clearly outlined other administrative responsibilities of the faculty, such as when and how often "at risk" forms will be filed. These were easily

reinforced by several of the interviewed faculty members' comments:

How long I keep things, it's a lot clearer about that. We keep records one semester passed their graduation. (Engaged faculty, T)

We don't keep anything very long, I used to keep them but with ISO we now know when we can get rid of some of the data. (focus group)

Yes, we're supposed to file these forms within so many weeks into the semester. That way we make a conscious effort to inform students and admin. Of those who are in a little bit of trouble. (Engaged faculty, O)

Student at risk forms. I keep copies and I keep them for a year, I used to keep them for five or ten years, but I haven't got the space and now with ISO we are only supposed to keep records for a year or so. (Engaged faculty, H)

The "engaged" faculty did not feel that any of the new requirements of ISO 9000 were a problem. Many of the faculty reinforced the fact that for much of what was being asked, they were already doing it. They also indicated that ISO 9000 had just formalized the way that the college wanted them to do certain things. They appreciated the clarification:

I already had a process in place, it certainly has formalized it a little better. (Engaged faculty, E)

It's great because it fits with the way I did things; I have to plot it all, you know, have a clear idea what is happening. (Engaged faculty, Q)

It's changed a bit for sure (but it) has not changed the practice; it's just the way you record what you're already doing. (focus group)

Impact on Student Evaluation

Interviewed faculty seemed convinced that the impact of the ISO 9000 on student evaluation was primarily in the way that they recorded student information, informed students at risk or maintained their records and not on test design, administration or prevention of cheating. They were appreciative of the process clarification and the articulated expectations for them to follow.

By and large, interviewed faculty were more impressed with the fact that with the ISO 9000 they were expected to engage more actively in program review and ongoing improvement of the overall student experience in their programs, not just their individual courses:

Program review, first, we never used to do it annually, so that's a change. Now there is a process that's clear. So this annual review, for me, is good.
(Engaged faculty, U and F)

ISO asks the question each year, you have to do it (program review) every year. That's something new.
(Engaged faculty, C and K)

You look (at) the course review at the end of the semester as a cluster with faculty from the group. (focus group, Engaged faculty, D)

Program review once a year now, versus never, except when we meet around budget time to cut something. (Engaged faculty, B)

We also meet several times a year with the students, this is so we can get feedback about a course and the feedback that they give us in terms of keepers and wanted changes, we have to show whether we've addressed that feedback. (Administration needs to know) what kind of changes we've made as a result of that feedback. (focus group)

Student Advisement

Faculty were asked if they felt that the ISO 9000 had influenced or changed the way that they advised, supervised or mentored their students. Most of those interviewed did not comment other than concerning the "at risk students":

We now have an advisement form, F17, if they fail a test. (Engaged faculty, P)

We used to write letters, now we get a copy of the F17 and we get lists of students and how they're doing in different courses. (focus group)

Formal documentation and the resultant obligation for the faculty to complete these documents was definitely something new for the faculty. Some faculty also felt that the process that they went through to identify

suggested remedial actions for the students were a welcome addition to their role.

I think that it made it easier for me to help them (students) establish what's (a) reasonable expectation. Because there's ways for them to give feedback and so that's different from what was happening. It's good (engaged faculty, E)

It's not required but I do it as a result of this process, I then feedback to them (students) what's been said. They get a better sense of what's going on so that's their ownership in the process. It makes my job a little easier. (Engaged faculty, P)

One faculty member stated that there was one significant development as a result of the ISO 9000 that could possibly change the way that faculty behave towards students.

We now have a student/faculty advisory committee, where faculty/student issues are discussed. (engaged faculty, G, and M)

Professional Development

The final faculty role that was investigated during this research project was that of maintaining a level of professional mastery. This involves the strategies that faculty engage in to ensure competence in their field.

Most faculty expressed frustration when asked about whether ISO had affected their planned professional development activities. They felt that for various

reasons, professional development had been sadly neglected at St. Lawrence College and that the ISO had not really addressed this faculty responsibility at all.

A new process was established with the implementation of the ISO that required all faculty to file a request for professional development. Faculty were expected to complete a special form and forward it to Personnel if they wanted to participate in a professional development activity. Faculty were not sure that this was a good process. The fact that they had to spend time filling out this form and having a formal approval process was a perceived barrier:

We have to fill out a form and send it over to Personnel, to have it put in our file, when we do PD, so they can track it. (focus group, engaged faculty H)

There's nothing in that process to insure that currency is happening. It's only about personal responsibility and accountability. (Engaged faculty, P)

Some faculty were a little more optimistic and had seen learning needs being met. They saw the ISO 9000 as a professional learning opportunity and participation as contributing to ongoing professional development:

Maybe it's broadened my professional development; in that I no longer just look at my professional area (I) try to do different things. (Engaged faculty, G)

It has been the best educational opportunity I think that I've had since I became an auditor. It got me really involved. (focus group, engaged faculty Q)

They did quite a few workshops on evaluation assessment, learning outcomes. There are not a lot of professional development opportunities, it's still our responsibility to either get it and to pay for it, to make sure that we're keeping up to date. (focus group, engaged faculty, E)

Faculty quickly identified the procedural changes that accompanied the implementation of the ISO 9000, but I am reluctant to conclude that the ISO changed the professional development responsibility of faculty. Providing formal structure and clearly articulated processes to follow has been perceived as helpful to faculty. The interviewed participants, as would be expected, were keen to support the ISO initiative and provided several candid comments in support of the ISO initiative. ISO was noted to have influenced faculty in the following ways:

Probably just being more organized. (Engaged faculty, J, B, P)

A little (more) structure. We try and run our meetings, you know, like our program meetings and our coordinator meetings. We're more faithful to keeping

minutes of every meeting and that kind of thing and we pass a copy along to the admin. assistant. (focus group, engaged faculty, H, W, Q)

Paper work, and the other one is the auditing.
(Engaged faculty, D, T)

I feel that we do a much better job of identifying students at risk and putting people on contracts for their learning that was never done. There are more people to share the load now because as a team we're responsible to identify them. We have an advisement form, which can be used for more serious cases; it holds weight that I didn't perceive before. It's changed my role a little bit, in the sense of how I deal with the students. (Engaged faculty, F, P)

The amount of paper work that you've been doing. The tracking of students. At risk (students). (Engaged faculty, C)

Lots more documenting and checking, (to) be able to show that we're doing it, you're more aware now that students may not have shown up for class, more aware of the types of difficulties that students are having, more aware of testing and test validation. I tend to do things a little differently than I did before this whole process, changing the strategies to incorporate you know TQ methods, and the ISO process things. We use a lot of that approach in the team when we think about making a change; we know we always of course have to check it fits the ISO criteria. (focus group, engaged faculty, E)

Summary:

The purpose of this study was to identify, through qualitative analysis of "engaged faculty" interview data, changes to faculty roles and responsibilities with the implementation of the ISO 9000 process improvement

strategy at one Canadian community college. Review of archived college documentation twinned with anecdotal responses from four administrative interviews painted a picture of the implementation strategy and anticipated faculty change. The ISO 9000 change initiative was intended to support and provide a framework for the TQM initiative recently implemented by the new college president.

Twenty-five "engaged" faculty were interviewed, followed by one small focus group, in an effort to understand their participation in the initiative and to determine if they perceived any changes in their role and responsibilities with the ISO 9000 initiative.

Brascamp and Ory's (1994) classification of faculty work formed the basis of the research questions focusing primarily on the role of the "teacher" (instruction; advising; creation of learning activities and professional development). The administrators clearly indicated that they expected change. However, the changes identified could be described as mechanistic (course outline congruence between campuses; compliance to teaching

schedules; maintenance of records of work done; maintenance of student records; attendance at team meetings; maintenance of student progress records and identification of students at risk, with appropriate remediation plans identified; attendance at faculty professional development sessions etc.)

Faculty on the other hand, had not seen the ISO 9000 initiative as a change vehicle directed at their behaviors or activities. Interviewed faculty perceived this particular change strategy as a generic attempt at standardization and not quality enhancement. Many of those interviewed believed the ISO 9000 was intended to address inconsistencies of other faculty but not themselves or as an administrative response to the external needs of the public.

Faculty interviewed in this study had been identified by the administrators as "engaged" in the ISO 9000 initiative. They were faculty who had demonstrated an interest in the ISO 9000 initiative and often had participated actively in the training or auditing processes. What was interesting and of some surprise, was

that faculty did not see significant change in their roles or responsibilities with the ISO 9000. The majority of those interviewed felt that there was a change in the way that they did things but not what they did, or were expected to do.

The roles and responsibilities of the interviewed faculty had indeed changed, but the faculty did not seem to be overtly aware of this. Accountability for students at risk and the expectation that records would be kept in a particular way, with the filing of an F17 form, was a new expectation. Also, the role of ISO "auditor" was identified and yet not acknowledged as a new role for the faculty. The researcher found this to be of particular interest.

Faculty identified many procedural changes, but few role changes. What the administrators saw as potentially significant change was perceived as minimal by the faculty. Management did see the magnitude of change differently than the interviewed faculty. This may have been because the faculty perceived these as necessary changes that were in the best interest of the students.

Accountability and documentation was now required, but faculty saw this just as another way of doing the business that they had been doing all along. This might contribute to an overall sense of realignment for the college and possible success with the ISO 9000 initiative.

Chapter V

Summary and Implications

Change in the Professional Bureaucracy does not sweep in from new administrators taking office to announce major reforms, nor from government techno structures intent on bringing the professionals under their control. Rather, change seeps in by the slow process of changing the professionals. (Mintzberg, Structure in Fives: Designing Effective Organizations, 213)

The purpose of this study was to identify, through qualitative analysis of interview data, engaged faculty members' perceptions regarding changing roles and responsibilities with the implementation of a process improvement strategy (ISO 9000).

During the series of interviews which make up the data of the study, faculty who had been identified as "engaged" in the ISO 9000 process spoke willingly and somewhat enthusiastically about their perceptions of the effect that this process improvement initiative had on their roles at St. Lawrence College. The faculty did not challenge my reassurances of confidentiality and some of them even stated that they would prefer it if their names were actually used in the study. They

genuinely seemed proud of being asked to participate in the study, and they did not indicate that they resented being classified as "engaged".

The administrators and the faculty interviewed were not hesitant to name names of other potential interviewees and were encouraging in their willingness to participate in the study. There was no indication that any participant was reluctant to discuss the topic and there were no respondents who indicated that their comments could not be recorded. It should be noted at this time, that there were six faculty members identified as "engaged" who did not agree to be interviewed. Those declining my invitation to participate either chose not to respond to my inquiries or stated that they were just too busy.

My own role as the researcher was multifaceted. I was interested in the respondents' comments from many perspectives. I have been working in professional development for several years, with a primary focus on faculty development. With any strategic change initiative it is important to understand the motivating

factors of "engagement" regardless of the stakeholder group. This study has enlightened me in this area, and I feel that I now have a much greater understanding of why some people choose to become engaged in certain initiatives.

I was also very interested in the specific initiative that St. Lawrence College had chosen to implement. There are many models of process improvement that could have been chosen, and this particular venue provided me with an opportunity to investigate one of these. St. Lawrence College had reviewed various options for implementation and they had chosen ISO 9000. With formal certification of the ISO 9000 I felt that St. Lawrence College had demonstrated due diligence to a process, and this would provide me with an opportunity to view an example or case study of one particular process improvement initiative.

In Chapter IV, I tried to let the administrators and the faculty speak for themselves. The initial "administrator" interviews set the scene for the selection of the "engaged" faculty and provided me an

opportunity to gain an understanding of the rationale and the implementation process for ISO 9000. Faculty interviews clarified the perceived impact and effect that the ISO 9000 had on their roles and responsibilities and allowed me an opportunity to experience their enthusiasm and understanding of the process.

As faculty and administrators spoke candidly, their words wove an interesting picture of the implementation process and rationale for the ISO 9000. This also assisted me in constructing my own interpretation of their reality, particularly regarding faculty roles and responsibilities.

During one visit to St. Lawrence College I had sensed something different. I later learned that part of one campus was going to be closed. Urgency for change, due to a significant budget cut was later revealed and noticed in the intonation of the voices of those interviewed, although not directly stated to me. During this one visit, significant tension was obvious when visiting the campus. However, I felt that this was not

reflected in the words of those interviewed, and I can only conclude that this was perceived to be an in-house matter. It was something that would not be relayed to an "outsider".

I will emphasize at this time, that this study is only reflective of the opinions of 4 administrators and 25 faculty. All of the faculty were identified as being "engaged" in the ISO 9000 initiative and the criteria for selection were totally subjective. Faculty were from every campus and several different programs. Transferability and generalization of the findings must be approached with caution and was not one of the identified goals for this study. There is no assumption that colleges engaged in a similar process would demonstrate similar findings as this was intended to be a study to explore the insights of this specific College, during a specific period of time.

Overview

The President at St. Lawrence College in Kingston Ontario started the college's quality journey with a strategic plan to familiarize the employees with the

philosophy of TQM. By working with the staff, the College Board, students and the advising community he tried to gain support and momentum. Small gains were initially noted but the ability to continue with a strong quality movement proved difficult.

The President's main objective had been to ensure that all employees were familiar with total quality principles (TQM) and that they incorporated them into their regular activities (work). A significant allocation of budget was put in place and resources were positioned to facilitate the training of all staff with the tools and opportunities of Total Quality Management. The President appeared to believe that if this was going to be a significant change/quality initiative at St. Lawrence College, everybody would have to make it their job.

As stated by Mintzberg, significant change cannot occur simply on the basis of senior academic officers stating that it will. Change occurs by "changing the professionals" (213) within. The college president did not feel that the Total Quality Initiative alone was

making inroads at St. Lawrence College, and he saw the need to provide more structure and a supporting framework. The ISO 9000 initiative was seen as a way of providing this support or direction.

The ISO 9000 is a process improvement model whereby the college staff (in order to operationalize the ISO 9000) went through various exercises to articulate measurable standards for all educative functions. Within this framework, specific faculty work standards were articulated, and staff held accountable for the achievement of these standards. Compliance with this, according to Mintzberg, would be unusual, as professional bureaucracies cannot rely "extensively on the formalization of professional work or on systems to plan and control them" (192). Nevertheless, considerable compliance by the "engaged" faculty, at this specific college appears to have been achieved.

The President and senior academic officers endorsed the ISO 9000 initiative in February of 1995, and the college became certified at the ISO 9001 level in June of 1996. This was hailed as a significant event, as St. Lawrence

College became the first Canadian community college (and the first in North America) to embrace this industrial model of quality management.

This top down implementation of ISO 9000 provided me with an interesting opportunity to gain insight into the workings of a "professional bureaucracy" (Mintzberg, 192). Normally this would imply that the work of professionals cannot easily be measured and as a result will not lend itself to standardization.

The question remaining for me was: How do faculty, who have chosen to engage actively in a process improvement initiative (ISO 9000) at a Canadian community college, perceive that their roles and responsibilities in the educative process (teaching and advising) have changed?

From the perspective of the college president, all employee groups were needed to ensure an effective quality system was put in place. However, the focus of this study was intended to be exclusive to a group of faculty who were identified as being "engaged" in the

process. I have spent considerable time interviewing four administrators in order to identify those faculty.

The task of identifying faculty did not prove to be problematic. The literature had indicated that faculty would most likely resist the introduction of any strategy that influences their ability to work as autonomous practitioners. Mintzberg, in his professional bureaucracy work (1979), states, "It is not likely that faculty will embrace an administrative initiative of this nature".

Contrary to Mintzberg's views, it was not difficult to find faculty who were identified as "engaged". Faculty who were interviewed, did not find the ISO 9000 initiative to be a major problem and furthermore, they felt that they could work within this structure without compromising their autonomy. Many of the interviewed "engaged" faculty felt that they were already doing many of the processes articulated in ISO 9000 and appreciated the structure and formality of the initiative.

Interviewed faculty also supported the fact that the ISO 9000 was perceived to be better than the ideas that had preceded it. ISO 9000 appeared to be more consistent with their existing values and easily understood. Rogers (1995) in his communication of innovation work and Havelock and Miles (1964) in their work on "early adopters" may have predicted this.

Engaged Faculty

In order to collect a list of potential faculty to interview or to find these "engaged" faculty, the senior academic officers were asked to state how they would identify faculty who could be described as "engaged". Many adjectives were used to identify these individuals but for the most part, visible participation in the components of the implementation plan was often identified as the reason for the perception that any one-faculty member was "engaged".

Faculty who demonstrated knowledge, interest and use of some of the TQM/ISO tools/processes were invited to be interviewed on a volunteer basis. Engagement, to the administrators, was exemplified by a visible presence in

the activities of the ISO 9000. When faculty were asked the same question, they reinforced the administrative perspective. Visible presence at initiatives was deemed to be reflective of engagement.

This may be explained by Bland and Schmitz (1988, 46) as they stated, "faculty vitality occurs when there is a match between an institution's mission and a faculty member's goals.

Faculty Attitudes

The "engaged" faculty at St. Lawrence College seemed to have developed a positive perception regarding the ISO 9000 process. Faculty stated that the opportunity to participate in the training sessions and to dialogue at the open forums had helped them gain the understanding necessary to become "engaged". This may be explained by Roger's diffusion of innovation theory as he states that information about anything new is "often sought from near-peers, especially information about what they think of its' value" (1995). This may be experienced through planned or spontaneous activities, helping to concretize the attributes of the innovation.

Incentives and Rewards

According to McKeachie, 1979 in Baldwin and Krotseng, 1995 (8), intrinsic incentives in the academic career have a greater relationship to faculty vitality than do extrinsic rewards. In this study, the faculty responses predominantly supported this contention. The majority of the interviewed faculty only acknowledged intrinsic rewards.

Celebration of the little successes and ensuring rewards are in place to acknowledge faculty accomplishments were not seen as important to the participants of this study.

Organizational/Business Change Strategies

In the literature, there seems to be growing evidence that the concept of Total Quality Management has application and utility for higher education. Noted problems, with TQM in education, have been that "traditional forays into the academic side of the house have often been rebuffed by the initial negative reactions of the faculty" (Jones and Timmerman, 1994. 412) and this has often been attributed to the lack of alignment between current business and academic

knowledge, particularly organizational theory in education.

Research into what contributes to the acceptance of the process improvement strategies has been especially lacking. This study contributes significantly to this field. The "engaged" faculty interviewed at St. Lawrence College did not feel that there was a conflict, and they felt that they could relate to expectations under the ISO 9000 initiative. The way in which the faculty were introduced to the ISO 9000 may have contributed to their willingness to participate in the training programs, auditing expectations and documentation of student data. These were new expectations and faculty generally did not view the ISO procedures as intrusive on their professional prerogatives; rather, they felt it shaped them up, brought consistency and enforced a welcome similarity among faculty. ISO 9000 apparently was aligned to their personal values.

Any ISO 9000 processes that could have been viewed as intrusive (evaluation procedures, audits and program

evaluations) were viewed by the "engaged" faculty as positive. They were unimposing to the "engaged" faculty and were perceived to be a necessary requirement of ongoing quality improvement.

Diffusion of innovation: Role of the College President

DeCosmo (1991, Harris (1993) and Peterson (1993) acknowledged that the top personnel of any organization must show a constancy of purpose if they intend to convince others that a process improvement strategy can work. Faculty identified as "engaged" indicated that the President's behaviors were consistent in this regard and contributed to their willingness to embrace the ISO 9000.

In the faculty member's perspective, the President of the college had targeted reasonable areas for improvement first. Faculty stated that this affected their willingness to become "engaged". Inconsistency of course outlines and intercampus differences had been obvious problems to many faculty. There was general agreement that students should be able to transfer courses from one campus to another. They also agreed

that there was no logical reason to have different course outlines for the same course at the three different campuses. These two areas were the initial areas targeted for change. Faculty supported the fundamental philosophy that it would be in the best interest of the students to address these issues. They stated that this produced early "wins" for the President. Implementing change slowly and targeting areas of universal concern were applauded.

Faculty stated that this affected their willingness to become "engaged". This supports Jones' and Timmerman's (1994) contention that if a change strategy is going to be successful in a college, the leaders need to consider the gap that exists between current behavior and the desired future state. The gap identified at St. Lawrence was considered reasonable and resolvable by the interviewed faculty.

Students at Risk

Students at risk were also a common concern with the interviewed faculty. The F17 form that was designed in the ISO 9000 process was seen to be good for the

students and for the faculty. Faculty did not challenge the concept that they should be accountable for identifying students at risk nor that they should be able to articulate a strategy that would assist the student in moving towards a positive solution to the unsuccessful component of their program.

Implementation of an administrative initiated change strategy, although predictably challenging, seemed to work in the situation of the faculty interviewed. This could have been because the President provided leadership and small gains were celebrated early. Even though this was not perceived to be important to the "interviewed faculty" the choice of issues addressed was seen as important. It appeared, in this case, that the processes selected for change aligned with the values and practice of the "engaged" faculty.

Roles and Responsibilities of Faculty

As stated earlier, the roles and responsibilities of faculty for the purpose of this study would be confined to a very narrow perspective. Although Brascamp and Ory (1994) state there are four primary areas of faculty

work: teaching; research and creative activity; practice and professional service and citizenship, the faculty role as "teacher" was the intended area of study. This was to include the roles of instruction, advising, supervising, creativity around learning activities and professional development.

Faculty Work: Instruction

The faculty interviewed did not acknowledge any significant change in their roles and responsibilities when they were asked about their role as instructors. The art of teaching, preparing for instruction, delivering instruction and choosing specific methods of delivery were not felt to have been influenced by the implementation of the ISO 9000 initiative.

The only area that consistently surfaced, as having been influenced by the ISO 9000 process was the development of course outlines. During my review of the implementation phase for ISO 9000, academic managers were noted to have stated that all faculty would be expected to demonstrate they had course outlines that followed the format approved by the director.

Even though faculty did not state it, this does demonstrate a change in the way that work is processed at the individual faculty level. However, I believe that management would see this as a significant change in faculty behavior. Collaboration between faculty from the three different campus locations had not occurred previously, and the end product (the course outline) was perceived to be much better for the students.

I think that this area of faculty work (instruction) lends itself to significant change with the ISO 9000 if due diligence to process is maintained. If and when the audit process of the ISO 9000 begins to focus on the areas of evidence of preparation for individual classes; course feedback and corrective actions taken; or accountability for professional development activities undertaken, faculty may be less approving.

Advising

Tracking the student "at risk" was consistently identified by faculty and administrators as prominent in the ISO 9000 initiative. This faculty responsibility was not necessarily new, but the paper tracking of such

work was. Interestingly, the interviewed faculty saw this as a necessary and positive change in the process of identifying students at risk. This was not perceived by the "engaged" faculty to be a different role. They noted that they were only being asked to document the process differently and to be more accountable to follow-up with the students.

The interviewed faculty consistently mentioned the F17 form as being new but it only reinforced the accountability the faculty were supposed to have already. The "engaged" faculty felt strongly that they were already performing the function of identifying students at risk but they did acknowledge that the use of the F17 form formalized it. However what was also acknowledged as being new in the process was sharing this form with their academic managers and demonstrating their strategies to address the at-risk student's issues.

Advising was felt to be a significant part of faculty work, but it was now more formalized and the student was

perceived to be taking a more active role in the process.

Supervising students

Faculty did not feel that this area of teaching had been affected by the ISO at all. This may be an area that surfaces later, especially if the ISO process improvement strategy articulates a clear process to follow when supervising students.

Creativity around learning activities

Faculty did not acknowledge any significant change in this area. Learning activities were still felt to be at the professor's discretion. According to the faculty who were interviewed, ISO was not considered as an influence in the choice of methods.

An impartial observer may question this. I believe that teaching methods were indeed influenced by the ISO.

Faculty were working from a common course outline, and this outline may have influenced the choice of methods. For some it may indeed just validate the already chosen

method but for others it may well have involved change in content or practice.

The precursor of the ISO had also set the scene for the use of some non-traditional group and process improvement strategies. Although only one faculty member openly admitted that TQM tools were now being used, where they had not been previously, the fact that all of the students are exposed to the tools suggests that more faculty may use them more frequently now.

Professional development

One of the areas of significant disappointment to the faculty, with the implementation of the ISO 9000 was in the area of professional development. The faculty stated that support for ongoing professional development was difficult to receive. They had anticipated that this might change with the ISO 9000. However, the tracking of ongoing professional development may be one area that has changed, but the availability of opportunities, other than in process improvement, TQM or ISO areas, was considered minimal.

Although the faculty were significantly supported in their learning about the TQM tools and ISO 9000 processes, faculty were not convinced that the ISO initiative had changed their opportunities for personal professional development.

Engaged faculty stated that professional development opportunities had become significantly limited before the time when the TQM/ISO 9000 process began. Budget restraints had limited the ability of faculty to choose their own professional development initiatives. The ISO 9000 had provided alternative opportunities for learning and possibly these supported some of the "engaged" faculty members' needs. It is unfortunate that the engaged faculty felt that the ISO 9000 was directly associated with the cost saving activities of the college and the lack of individual professional development activities.

Faculty did not see this as significantly different from before the ISO 9000. The exception was that the ISO 9000 skills were now added to the repertoire of their skills

that needed to be continuously upgraded, along with their vocational, technological and teaching skills.

Other Findings: the role of the "auditor"

Past studies of faculty workload show almost uniformly that faculty members spend considerable time on the teaching component of their work (Bowen and Schuster, 1990; Winter and Bowen, 1982). What was interesting in this study is that the "engaged" faculty spent significant time performing the roles created under the ISO 9000 initiative.

Faculty performing the "auditor" role in the ISO 9000 initiative were asked to review colleagues performance and to determine if they were compliant with the targeted objectives of the current audit. This is a very unique role for faculty to play, especially in an environment where faculty traditionally have not gone to visit other faculty member's classroom, let alone with a mandate to report non-compliances.

The interviewed faculty perceived this role to be a unique one. They saw this role in the context of peer

review and continuous improvement and not as a potentially punitive process. It would be interesting to investigate this further because there was every indication that documented non-compliance did occur. There was, however, no mention of whether the administrators acted upon non-compliances. Just how this fits into the overall performance review or remediation plans for faculty was not the focus of this study but it would be interesting to pursue.

Faculty spent time in training, completing forms and performing audit functions. These tasks are definitely outside the traditional job description of faculty; therefore it is surprising that these were not identified as new responsibilities. Perhaps faculty did not see this as an added responsibility because they felt that it was necessary to move the institution towards the quality standards.

Identification of standards

One of the main hurdles to the acceptance of any process improvement initiative in education is the perceived difficulty of finding indicators that can be useful in

measuring higher education's core processes of teaching and learning. I agree with Anna Neumann's statement "frustration can come when there is a perceived lack of easily implemented, all-purpose indicators for assessing institutional performance" (1994, 261).

I believe that, at the time of the study, the ISO 9000 initiative has not matured enough at St. Lawrence to demonstrate accountability for most of the other expected faculty outcomes, but I do think that it has mobilized faculty towards some preliminary level of standards development (i.e. standardized course outlines, students at risk forms) I think that faculty have yet to realize the depth to which the ISO 9000 could permit scrutinization of their work, especially if administration chooses to move selectively into this area.

Summary

Faculty expectations to date have been focused primarily on the superficial areas of course outlines and student-at-risk forms, and not on the evidence of planned classroom activities, learning outcomes or evaluation

strategies. Faculty may not be so willing to be "engaged" and compliant if or when the ISO 9000 proceeds to influence more specific areas of their work. At this time, it is not clear whether the administration will maintain the momentum of the ISO 9000 and proceed into the more contentious areas of faculty work.

Conclusions

Gaining insight into perceived changes of roles and responsibilities within any professional group is not an easy task. With the introduction of the ISO 9000 at St. Lawrence College, the President expected change to occur. A review of the literature had indicated that this change would likely be met with some resistance and that it would occur slowly, if at all.

Historically, the management of faculty or autonomous practitioners has been a unique process. According to Mintzberg (1989), the working of a professional bureaucracy challenges us to understand a system of "imposed top-down" management. Faculty and managers traditionally co-exist, agreeing in some areas of control and not in others.

Contrary to Mintzberg's theory, change in this professional bureaucracy did seem to sweep in from a new administrator taking office, and this particular administrator, the President, appeared to have significantly influenced the faculty at St. Lawrence College.

St. Lawrence College's ISO 9000 process improvement initiative challenges Mintzberg's paradigm. Faculty, the key professionals at St. Lawrence College, did not appear to challenge the concept of being managed in areas that have traditionally been reserved as the autonomous domain of faculty work (course outlines, management of students at risk, etc.)

Faculty, although they denied it, did demonstrate a change in their work patterns and behavior reflective of the process improvement strategy. Faculty allowed the process to impose limitations and direction upon traditional faculty work and they seemed to work collaboratively (something new for them) with

colleagues. A genuine willingness to do this was also acknowledged.

According to Rogers, (1995) this may be due to the alignment of values between the faculty and the direction chosen by the managers, or it may be due to the underlying thoughts of the faculty that it was about time to be accountable.

During the process of data retrieval, the "engaged" faculty indicated another influence that had not been considered initially by the researcher. The role of the support staff person and the inter-relationship of the faculty/support staff work was not investigated. Some of the faculty implied that support staff made a significant contribution and that this played a role in their ability to be compliant.

Investigation of the relationship between faculty/staff and administration/staff roles and responsibilities within the professional bureaucracy may help explain this challenge to Mintzberg's paradigm.

Rewards and Recognition

St. Lawrence College spent considerable time acknowledging the small accomplishments along the IOS 9000 implementation path. Key benchmarks were celebrated and all staff were encouraged to engage in the certifications. Photos were taken, newsletters circulated, and significant people were recognized along the way. Although there were extrinsic rewards noted by some faculty, the interviewed faculty seemed to indicate the intrinsic incentives had a greater impact on their willingness to become engaged in the ISO 9000.

It is not known if the ISO 9000 normally sets more intrinsic rewards in place, but faculty definitely acknowledged these were factors in their engagement. Seeing the problems of "at risk students" addressed using the F17 forms and more consistent course outlines were rewarding to faculty.

Innovation and Communication of Innovation

This study supports Roger's diffusion of innovation research in that faculty interviewed saw the ISO 9000 as "better than the idea that superseded it" and that it

was "more consistent with their existing values"

(Rogers, 1995) easy to understand/try and observable.

Implications for Transitional or Institutional Change Leaders

A study of this nature may be perceived as non-conclusive as it only involves a very small sample size and was qualitative in nature. The transferability of the findings was never the intent, and the following recommendations are put forward, which may influence college administrators, faculty, support staff or professional development consultants.

Context for Change: Strategic

1. Colleges considering a strategic change initiative should not underestimate the role of the senior academic officers in the visible support of the initiative.

Faculty strongly voiced their opinions regarding the role of the college president. They felt that his open, willing attitude to meet with them and to explain the importance of the initiative was important to their understanding and ultimate engagement.

2. With any change strategy, especially if it is significant, it must be supported with the resources necessary for training and development. Time is one of the most significant of these resources.

Professional development and clarity regarding the rationale and the implementation process can significantly influence the success of any initiative. Staff need time to learn and to consolidate the information provided to them. This implies significant resources (financial) must be considered in the marketing and implementation phases of the initiative. Knowledgeable faculty proved to be much more supportive of this initiative at St. Lawrence College. Time to learn and time to talk to respected colleagues may provide the opportunity for faculty to endorse the initiative. It should be noted that some faculty might be unwilling to engage in this training.

3. Change can occur in a professional bureaucracy if the professionals see the relevance and the initiative is aligned with the values of the individuals. This may occur if the direction that the initiative is taking the

institution is perceived to be bridging a reasonable, achievable gap.

It is always easier to move people in a direction that they see is appropriate to meeting some of their needs. Individuals in this study saw the requests and demands of the academic managers as achievable and desired. It was interesting to see how unobtrusive faculty perceived this significant change initiative.

4. Business and industry initiatives, in particular, change strategies may have applicability to education.

If these change strategies are found to be relevant and customized to the educational environment, it is more likely that they will be accepted. Transferability to the educative process is essential, in both language and articulation of the processes required

5. College bureaucracy can be streamlined with an increase in efficiency as the result. This may also lead to more inter-departmental sharing.

With any concerted effort and review process regarding process improvement, there should be a refining of processes and a minimizing of redundancy. Inclusion of the front line worker in this process is essential. The student's needs should be the fulcrum of any change initiative and if the expected outcomes are actually written down, there is an increased likelihood that they will be achieved.

Faculty Roles:

6. Identification and documentation of faculty work standards can occur. This should involve a collaborative process to ensure accuracy and commitment.

This particular college engaged in a process of articulating faculty work standards. They were successful in changing the course outline process and deliverable and in articulating and implementing a student at risk process. Provided with the appropriate time and resources I believe that the ongoing audit process at this college and the commitment to monitoring faculty work will result in further clarity regarding faculty work.

7. Certain elements of professional work can be controlled in a top-down manner and certain complex work processes can be refined and formalized by rules and regulations.

For some faculty this may be more easily accepted than for others. Just why the faculty at St. Lawrence were compliant is interesting. A combination of identified need and a feeling of "we need something to standardize things and to make people accountable" may have explained it for St. Lawrence. What was most significant, however, was the way that this type of change strategy was introduced. A problem area was identified (inconsistent course outlines and students at risk) clearly endorsed processes were articulated to address these specific areas. This has laid the foundation for the modification and development of other rules, regulations or processes.

Process: Change Strategies

8. During any strategic change strategy, staff must be provided with the opportunity to dialogue and to ask questions. It is especially significant if they are

encouraged and supported in opportunities to dialogue with respected peers in open public forums.

The opportunity to gain understanding by listening to the questions and responses of peers expands the understanding and has the potential to minimize distrust and fear. A transparent process is much easier for individuals to embrace than one that is non-collaborative or cloistered in the senior ranks.

9. Celebration of small gains or early wins must happen.

Participants in any change initiative must be acknowledged for their commitment to the process and for any significant first steps. This has the potential to provide clarity of purpose, direction and learning.

Others, not quite so sure of the expectations look to these demonstrations of success to gain confidence in the process and to gain understanding of the deliverables. Some employees need a clear picture to follow and others can lead the way.

10. With any change strategy it is important to archive or track the component parts and the significant events.

Looking back into the archived materials, it was difficult to gain a clear picture of actual events. Faculty and administrators did their best to remember the significant activities and opportunities for influencing the engagement of faculty, but it is foggy.

Historical documentation is important for replication of exemplary practices and shared learning. Gaps in the information available may compromise the true understanding of the process or change strategy.

11. Successful implementation of a process improvement strategy is aided by a framework (like the ISO 9000) for implementation and accountability.

Just as a process improvement strategy implies, accountability is an essential component. Thoughtful articulation and a transparent process will more likely ensure endorsement from participants and will be more readily recognized as being achieved.

12. Successful implementation of a change strategy needs to have endorsement from all sectors of the institution.

This may be more easily achieved from the support staff but can be achieved from the faculty.

The way faculty are introduced to the initiative can play a significant role in their compliance.

Understanding the role that the senior academic officers play in the endorsement and the transparency of this endorsement is paramount.

Faculty Resistance to change

13. Faculty roles and responsibilities can be changed without obvious resistance and possibly with excitement and commitment.

This particular college demonstrated that faculty could take on new roles and responsibilities and not be overtly resentful or militant. The "auditor" role for faculty was not perceived by the engaged faculty as intrusive and it was actually embraced by some of the interviewed faculty. This was definitely a new role and just how faculty became engaged and supportive of this is still somewhat of a mystery. The non-traditional role of peer evaluation is indeed a challenging one, but was

perceived by the engaged faculty to be essential in the accountability framework and was not linked directly to performance review. This may be why it was allowed.

14. An intrinsic reward system can work when dealing with faculty.

Faculty did not seem to be looking for extrinsic rewards in this particular study. A sense of accomplishment or a feeling of doing the best for the students was a strong motivating factor for many of the interviewed faculty. Although many faculty received some sense of status, monetary rewards were not forthcoming.

Limitations of the Study

The most obvious limitation of this study is that not all faculty had an opportunity to participate. The participants were limited to those who had been subjectively identified by the administrators as those faculty who were perceived to be "engaged" in the ISO 9000 initiative. The immediate academic managers of these "engaged" faculty were also not interviewed. By the design of the study, the administrators were

interviewed to describe and ultimately select the engaged faculty, but the faculty's immediate manager was not included in the study.

It would be interesting to see if the immediate managers of engaged faculty detected any changes in the way that they deal with their students, work with their peers, process the work that they do or the kinds of professional development activities they engage in. This process of faculty identification was highly selective in only focusing on "engaged" faculty as defined by the administrators, not even by faculty themselves.

The study was limited in the sense that the researcher collected anecdotal responses from the faculty and then transcribed their works directly. No actual observation of teaching, work with the F17 forms, or participating in the audit process occurred. Had this been true, the researcher may have drawn other conclusions regarding the roles and responsibilities of faculty.

Many of the faculty interviewed, indicated an awareness of the TQM tools. The researcher certainly has a better understanding of the variety of tools available and found it interesting that the college had made it mandatory for all students to enroll in an elective/general education course on TQM. Which TQM tools were consistently used for what and which of the tools are used most frequently could form the basis of a question, intended to gain understanding around the influence or appropriateness of TQM in education.

Gaining an understanding from the students regarding their commitment to TQM, their understanding of the tools and the appropriate use of these tools may prove interesting.

Future areas of Research

With any study of this magnitude, there are many questions generated out of the findings. Qualitative research is a new domain for me and this generates a unique question. Would this study have generated different findings if the questions were designed using a quantitative format/methodology?

If disciplinary specialization is considered one of the primary units of membership for faculty, I question why the interviewed faculty did not fall more easily into such disciplinary areas. According to the literature, disciplinary peers provide significant support and influence to faculty. In this study one would question why more disciplinary specific faculty groups were not identified. Engaged faculty in this study seemed to identify significantly with other faculty who were also engaged (i.e. Auditors, trainers) instead of with their own discipline specific group.

Although there were two discipline specific groups originally identified, one would have anticipated here should have been more. Many of the faculty identified by the administrators were identified as leaders in their groups, although they did not appear to have significantly influenced their immediate peers to become engaged.

This might be explained by the timing of the initiative within the college. Roger's indicates that significant

change within an institution may happen very slowly. It might have been premature to look for this influence to have occurred. Alternatively, the members of the faculty who were engaged had formed a new group of auditors that was non-disciplinary. Interviewed faculty may now be identifying with this (auditor) group and influencing colleagues in a different manner.

This particular study lends itself naturally to many additional research questions. The current study focused on faculty who were perceived to be engaged with the ISO 9000 model implemented at St. Lawrence College. The most obvious question reflective of the current study is what would be the responses of faculty who were not perceived to be engaged in the ISO 9000?

There is an underlying theme, supported by some of the responses, that the support staff may have played a unique role in the perception of faculty being classified as "engaged". According to Mintzberg's theories of professional bureaucracies, faculty may function in a specific way within the bureaucracy but support staff predominantly work in a top-down manner.

As the ISO 9000 was an administratively initiated change strategy, it would be anticipated that support staff members would work in a compliant way with any initiative implemented by the administration. Was it possible that due to the diligent work of some staff, the faculty were perceived to be engaged? Did the support staff of engaged faculty members play a different role than with the faculty who were not engaged?

One final area of future investigation revolves around the academic leaders of the institution. With the design of this particular study, the immediate academic administrator or manager was not involved in the study. Two senior academic officers were selectively chosen to participate but the influence and the role of the "engaged" faculty member's immediate superior was not addressed. This could be a significant missing piece in the understanding of what truly influenced the willingness of the faculty to endorse the ISO 9000 initiative.

REFLECTIONS

Reflections:

Reflecting on the magnitude of this project makes me wonder why the path was such an important one to remain on. I have taken an extended period of time to complete this journey and experienced many intersecting paths along the way. I have experienced a learning process that has moved me along the continuum of higher levels of questioning, participating, researching and writing.

A quest to understand the meaning of "quality" and how that can be influenced was a start to the project but only a start. Being in a position of unknowing is a humbling experience and the need to question and to find answers an intriguing one. I know that I am a different person than the one who took the first steps of this journey, and I feel that I will never return to that base again. I would have changed with time alone, but this is different. I am a different thinker, a different writer and a different person.

I know that this has been a personal journey and one that will significantly re-direct my future. Where it takes me will be another adventure, different from this one but none-the-less valuable.

APPENDICES

APPENDIX A

TOOLS OF QUALITY

Fishbone Diagrams (cause and effect):

Cause-and-effect diagram of Ishikawa. Used after brainstorming sessions to come up with possible causes of problems.

Histograms:

Bar graphs used for arranging and displaying data by groups or classes. It helps to spot patterns.

Pareto Chart:

Histogram that shows problems or possible causes arranged according to frequency.

Scatter Diagrams:

A graph of raw scores used to study the possible relationship between two variables

Flowcharts:

A diagram representing the steps of a process.

Control Charts:

A piece of graph paper with three lines on it, one for the "average" and the other two for the upper and lower control limits.

Check Sheet:

A form, usually printed on paper, for recording data.

(Spanbauer 1992; Cornesky 1991; Wallin and Ryan 1994)

APPENDIX B

PROCESS IMPROVEMENT TOOLS

(Many of these tools are not unique to quality management strategies)

Brainstorming:

An idea-generating technique. Used to help a group come up with ideas for possible causes or solutions. (Rules of participation are followed)

Plan-Do-Check-Act Cycle (sometimes called the Cycle)

A specific protocol to follow when evaluating a process.

Nominal Group Technique:

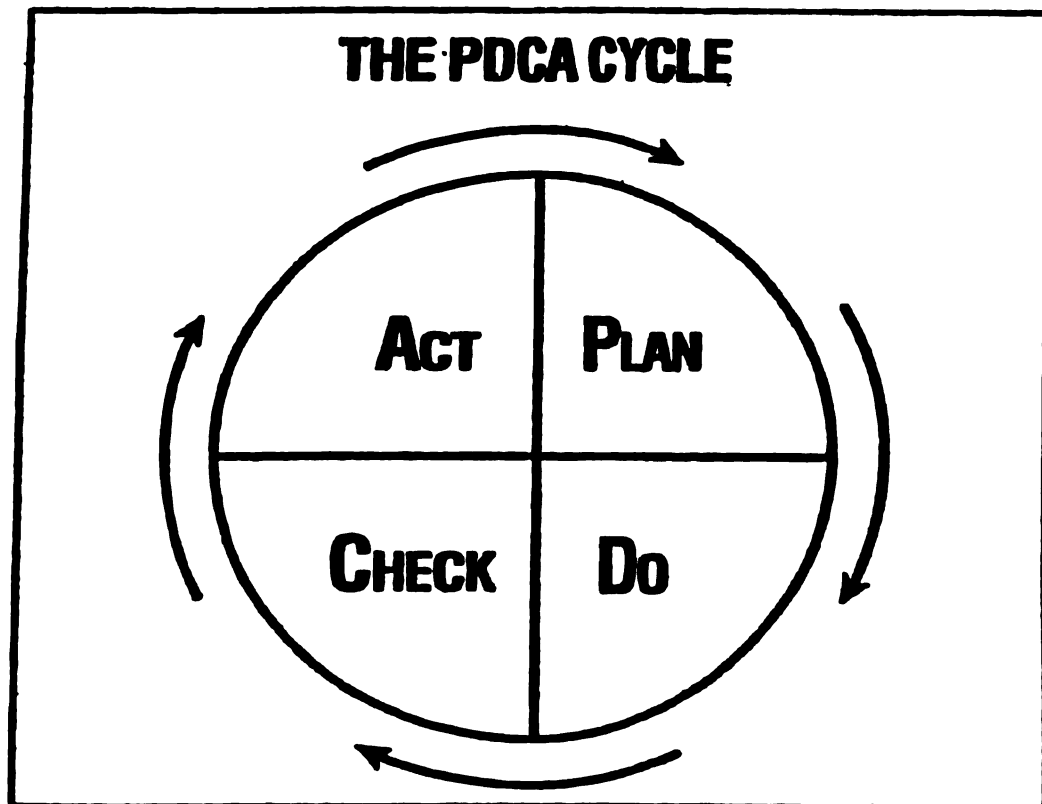
One of a class of methods referred to as "brainwriting techniques". A highly structured idea-generating process.

(Zemke 1993; Cornesky 1991; Wallin & Ryan 1994;
Spanbauer 1992)

APPENDIX C

PDCA CYCLE

DEMING MANAGEMENT AT WORK



APPENDIX D

ISO 9000 CATEGORIES

ISO 9001

A model for quality assurance in design, development, production, installation, and servicing. The most comprehensive standard, with 20 elements or functional clauses. May be applied to manufacturing as well as service.

ISO 9002

A model for quality assurance in production, installation, and servicing. Does not include the design function of ISO 9001 and only has 19 elements.

ISO 9003

A model for quality assurance in final inspection and testing and the least comprehensive standard. It addresses only the requirements for detection and control of problems during final inspection and testing. It has 16 elements, ten of which has less comprehensive requirements than do ISO 9001 and ISO 9002.

(Izad M; Kashef A.E; Stadt R.W, 1996, Quality in Higher Education; Lessons learned from the Baldrige Award, Demming Prize, and ISO 9000 Registration, Journal of Industrial Teacher Education, Vol. 33, No. 2, 1996)

APPENDIX E

ISO 9001 Standards to St. Lawrence College

Relationship of ISO 9001 Standards to St. Lawrence College Key Processes

Design Process	Learning Processes	ISO Reference
1. Define Strategic Direction	1. SLC Publication of Offerings	4.3, 4.5, 4.16
2. Gather Input	2. Potential Clients Apply of Admission or Express a Learning Need	4.1
3. Develop Concepts	3. Evaluation of Credentials, PLA Assessment of Customer Needs	4.3, 4.5 4.9, 4.10
4. Assess Needs & Market Analysis	4. Acceptance into Offering and Finalization of Contract	4.12, 4.16
5. Identify Staff Resources Required	5. Student Orientation	
6. Priorize & Recommend to EC	6. Delivery of Learning Activities	4.1, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.11, 4.12, 4.16
7. EC Approves	7. Support for Learning	4.1, 4.6, 4.7, 4.8, 4.9
8. Identify Staff Resources, Costs Establish Program Development Term	8. On-going and Final Assessment and Evaluation	4.1, 4.8, 4.9, 4.19, 4.11, 4.12, 4.13, 4.15
9. EC Approves	9. Customer/Client Feedback	4.1, 4.5, 4.8, 4.10, 4.12, 4.15
10. Develop Program Standards	10. Progress Records	
11. Prepare Proposal	11. Awarding of Qualifications	4.1, 4.5, 4.9, 4.10, 4.12, 4.16
12. Board of Governors Approves	12. Identification of Non-conformities	4.1, 4.5, 4.13, 4.14, 4.16
13. MET Approves	13. Evaluation of Causes of Non-conformities	4.1, 4.5, 4.13, 4.14, 4.16
14. Assign for Delivery	14. Corrective Action	4.1, 4.5, 4.13, 4.14, 4.16
15. Develop Curriculum	15. Preventive Action	4.1, 4.5, 4.13, 4.14, 4.16
16. Prepare Course of Outlines	16. Review of Design	4.1, 4.4, 4.5, 4.6, 4.7, 4.9, 4.11, 4.13, 4.16, 4.18, 4.20
	17. Input for Design Change	4.1, 4.4, 4.5, 4.9, 4.13, 4.14, 4.16
	18. Identification of Training Needs	4.1, 4.5, 4.9, 4.16, 4.18

APPENDIX F

INTRODUCTORY LETTER

Dear:

Vice President Jeanie Sawyer has informed you of the research that I am currently involved. I am presently studying towards a doctorate in Adult Education at Michigan State University, with an anticipated completion date in 1998. My research focus and proposed study is about faculty perceptions of the ISO 9000 initiative. I am interested in gaining an understanding of how faculty experience the ISO 9000 initiative and any changes they identify in their roles and responsibilities.

I would like to invite you to participate in my study. I'll be asking you to share your perceptions in a taped interview of approximately 60-90 minutes in length. I am most interested in your thoughts perceptions and feelings about the changes that have occurred with this initiative.

Your personal accounts and perceptions are of significance to me and there are no right and wrong responses. I will not be evaluating the quality of your responses. I am not attempting to evaluate the effectiveness of the ISO 9000 initiative or whether this is the best process improvement program for St. Lawrence College. Data collected from this study will not be shared with anyone at St. Lawrence college, whether academic, support or management. Codes will be used in place of your name and all records will be securely held off campus.

If you agree to participate in this study with me, you will of course be free to withdraw from the study at any time, without penalty or recrimination. If you choose to withdraw from the study, all data that I have collected from you will be destroyed. In reporting my findings, every safeguard will be taken to protect your anonymity by disguising your name and any information that could be used to identify you.

I am looking forward to beginning my research and feel that you can significantly contribute to my understanding of the ISO 9000 initiative and the impact on the faculty at St. Lawrence College. Gaining insight from front line workers in the college system is important if we are going to understand more about the pressures, satisfactions, and changes experienced with this type of process improvement strategy.

If you have any questions, I can be contacted between and at and I invite you to contact me directly.

Yours sincerely,

Patricia Hedley
1-416-699-3325 (voice/fax)
1-416-699-8001 (home)
email. hedley@admin.Humberc.on.ca

APPENDIX G

PARTICIPANT CONSENT FORM

I have read the attached letter outlining the basic research concept and agree to voluntarily participate in the study. I am aware that I can withdraw from the study, without penalty or recrimination. I also understand that my participation is voluntary and that all records will be kept in confidence and that you will ensure anonymity, by disguising my name and by keeping other shared information securely housed of campus.

Name: _____ **Phone # and ext.** _____
Please print

Signature: _____ **Date:** _____
Participant

Signature: _____ **Date:** _____
Patricia Hedley

APPENDIX H

TOTAL QUALITY STEARING COMMITTEE

The TQSC will continue with the following mandate.
TQSC will focus on:

- * Issues relating implementation of Total Quality across the college.
- * Ongoing training and educational needs
- * Deployment and promotion of the TQ concepts and tools
- * Developing improvement ideas and recommendations for the college
- * Team monitoring and facilitation
- * Development of measurement tools
- * Identification of tasks

(St.Lawrence College Documentation)

APPENDIX I

QUALITY COUNCIL

To provide strategic direction and leadership to the implementation of total quality principals and processes. The council meets on a by-monthly basis to ensure that the implementation plan is proceeding on a timely basis.

QC will focus on the following

- * Setting and approving goals and priorities
- * Defining benchmarks and improvement targets
- * Allocating resources
- * Removing barriers
- * Chartering college wide teams
- * Receiving team recommendations
- * Providing rewards and recognition

APPENDIX J

CHECKLIST FOR AUDITS

1. Course outline that follows the current format approved by your director and containing learning outcomes, elements of performance, objectives and a schedule of delivery
2. Evidence of preparation for individual class and a record of the work done to date.
3. Posted office hours for students, attendance registers
If you specify attendance requirements as part of the course requirements
4. Tests; assignments; projects assigned, including how you link those to learning outcomes and elements of performance
5. Test validation
6. Record of student grads on assignments; projects; tests everything that makes up the final grade.
7. Identification of at risk students with other members Of your project team.
8. A record of academic interventions; student advisement forms; or other referrals made to assist the student succeeding.
9. Course feedback you have solicited during the course together with a record of actions taken on feedback.
10. Formal course feedback at the end of the course together with corrective action undertaken to improve any areas of student concern.
11. Professional development training records completed for all Professional Development of last 6 months.
12. Participation on program review.

APPENDIX K

THEME TAGS

Accountability	Rewards
Auditors	Role Models
Benchmarking	Scrutiny
Change Management	Service
Compliance	Standards
Commitment	Structure
Communication	Tangible processes
Compatibility	Team Playing
Comprehensive	Tracking
Convergence	Transferability
Credibility	Voluntary
Currency	
Data Collection	
Effective TQ Management	
Evaluation	
Empowerment	
Improved Process	
International recognition	
Leadership	
Market value	
Marketing	
Natural Evolution	
New Leadership	
New Identity	
Organization	
Ongoing	
Policy	
Prepared	
Pride	
Process Improvement Strategy	
Quality	
Relevance	

APPENDIX L

UCHRIS APPROVAL FORM

MICHIGAN STATE UNIVERSITY

December 16, 1997

TO: Kathryn M. Moore
418 Erickson Hall

RE: IRB#: 97-819
TITLE: FACULTY ROLES AND RESPONSIBILITIES: HAVE THEY
CHANGED WITH ISO 9000
REVISION REQUESTED: N/A
CATEGORY: 1-C, S
APPROVAL DATE: 12/12/97

The University Committee on Research Involving Human Subjects' (UCHRIS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCHRIS approved this project and any revisions listed above.

RENEWAL: UCHRIS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must use the green renewal form (enclosed with the original approval letter or when a project is renewed) to seek updated certification. There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

REVISIONS: UCHRIS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please use the green renewal form. To revise an approved protocol at any other time during the year, send your written request to the UCHRIS Chair, requesting revised approval and referencing the project's IRB # and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable.



**PROBLEMS/
CHANGES:**

Should either of the following arise during the course of the work, investigators must notify UCHRIS promptly: (1) problems (unexpected side effects, complaints, etc.) involving human subjects or (2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.

If we can be of any future help, please do not hesitate to contact us at (517) 355-2180 or FAX (517) 432-1171.

Sincerely,

David E. Wright, Ph.D.
UCHRIS Chair

DSW:bcd

cc: Patricia Hedley

University Committee on
Research Involving
Human Subjects
(UCHRIS)
Michigan State University
246 Administration Building
East Lansing, Michigan
48824-1048

517/355-2180
FAX: 517/432-1171

The Michigan State University
IRSA is Institutional Oversight:
Excellence in Action

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