

**Offerings in Distance Education;
Quality Control in the Structural Arrangements
and Practices in Post Secondary Distance Education.
A Critical Evaluation of the Proposals in the Literature.**

Patrick Stoddart

A Thesis

In

The Department

Of

Education

(Educational Technology)

**Presented in Partial Fulfillment of the Requirements
For the Degree of Master of Arts at
Concordia University
Montreal, Quebec, Canada**

February 2004

© Patrick Stoddart 2004



National Library
of Canada

Bibliothèque nationale
du Canada

Acquisitions and
Bibliographic Services

Acquisitons et
services bibliographiques

395 Wellington Street
Ottawa ON K1A 0N4
Canada

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file *Votre référence*
ISBN: 0-612-91119-5
Our file *Notre référence*
ISBN: 0-612-91119-5

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this dissertation.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de ce manuscrit.

While these forms may be included in the document page count, their removal does not represent any loss of content from the dissertation.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

ABSTRACT

Offerings in Distance Education;
Quality Control in the Structural Arrangements
and Practices in Post Secondary Distance Education.
A Critical Evaluation of the Proposals in the Literature.

Patrick Stoddart

This thesis is an in depth study of the published literature on quality control in distance education. This research examines and synthesizes the main and current themes of published scholarly thought in the area of structural arrangements and practices of quality control in post secondary distance education, in the Western tradition. It is shown that there is significant breadth and depth in the published literature that defines the terms “quality,” and “distance education.” As well, there is also significant published research dealing with issues of quality concerning the management and administration of distance educational institutions, and also with the quality of distance educational course design. Conversely, it has been determined that there is a significant deficiency in the breadth and depth of published literature regarding the quality of distance educational program design. This deficiency also applies to the literature concerned with the offering of quality technical, library, and support services in distance education, and with the offering of a quality distance educational experience to those of other cultures and of special populations.

TABLE OF CONTENTS

CHAPTER 1: QUALITY CONTROL IN DISTANCE EDUCATION.....	1
An Introduction to the Research Problem.....	1
Research Question.....	1
Published Research Situation.....	2
Importance of the Study.....	3
General Delimitations Pertaining to this Work.....	4
The Balance of this Work.....	4
 CHAPTER 2: METHODOLOGY USED FOR THIS STUDY.....	 6
Selection and Description of Data Sources.....	6
Collection of Data Sources.....	8
Coding of Data Sources.....	8
Analysis of Data Sources.....	10
Potential Bias and Issues of Rigor.....	10
Concluding Observations.....	11
 CHAPTER 3: TERMONOLOGY: DEFINITIONS USED OF “DISTANCE EDUCATION”, “QUALITY” AND THEIR RELATIONSHIPS.....	 12
Defining and Examining the Terms Distance Education.....	12
Distance Education, Modes and Models in Post Secondary Provisioning.....	13
Distance Education, the Higher Educational Providers.....	15
Defining the Term “Quality” for this Study.....	16
Ensuring Good Quality.....	19
Quality in Education.....	21
Discussing Quality Descriptives in Traditional and Distance Education.....	21
Comparing Issues of Quality in Traditional and Distance Education.....	22
Assuring Good Quality Through Accreditation, Assessment, and Auditing.....	23
Where to From Here?.....	25
 CHAPTER 4: MANAGERIAL AND OPERATIONAL ISSUES OF QUALITY CONTROL IN DISTANCE EDUCATION.....	 27
Distance Institutional Philosophies, Mission, Objectives and Goals Vis-à-Vis Quality.....	27
Distance Institutional Quality Policy.....	29
Cultivating Quality Through the Use of Quality Facilitators and Teams.....	31
Quality Facilitators, the Quality Champion.....	31
Quality Teams, Quality Steering Committees and Buffer Groups.....	32
Quality Teams, Self-Management Teams and Quality Control Circles....	32
Ensuring and Cultivating Quality of Academic and Support Staff.....	34
Ensuring and Enhancing the Quality of Distance Educational Support Staff.....	34

Ensuring and Enhancing the Quality of Distance Educational Academics.....	35
Ensuring and Enhancing the Quality of Distance Educational Teaching Assistants.....	38
Accounting, Monitoring, and Marketing, Quality in Distance Education.....	39
Accounting Methods to Ensure Quality in Distance Education.....	39
Ongoing Monitoring of Quality in Distance Educational Institutions.....	41
Marketing of Quality in Distance Education.....	44
Quality Management Systems in Distance Education.....	45
Closing Remarks Regarding these Managerial and Operational Issues of Quality	49
CHAPTER 5: QUALITY OF DISTANCE EDUCATIONAL PEDAGOGY, SERVICES, AND ACCESSIBILITY.....	50
Pedagogical considerations and Quality in Distance Education.....	50
The Literature Surrounding Quality and Program Design in Distance Education.....	51
The Pedagogy of Quality Course Design in Distance Education.....	53
Technical and Student Support Services and Quality Control in Distance Education.....	60
Quality and Technological Services.....	61
Quality of Student Services.....	64
Quality of Library Support Services.....	66
Quality of Accessibility in Distance Education.....	68
Cultural Considerations of Quality in Distance Education.....	68
The Disabled and Quality Distance Education.....	69
Conclusion.....	70
CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS.....	71
Reactions in the Literature, to the Literature, Those Supporting Current Directions.....	71
Reactions in the Literature, to the Literature, The Challengers to Current Directions.....	73
General Conclusions Suggestions for Future Research.....	77
General Weaknesses in Current Literature.....	78
Future Research into Managerial and Operational Aspects of Quality in Distance Education.....	79
Literature Concerning Course and Program Pedagogy.....	80
Research Comparing Traditional and Distance Educational Quality.....	81
Enhancing Quality Through Better Communications.....	81
Future Directions in Distance Educational Quality Terminology.....	82
Future Research into Issues of Providing Quality to Different Cultures and the Disabled.....	82
Future Research into Issues of Providing Quality of Technical, Library and Student Services.....	83

Where Will the Literature be in the Future, and in What Form?.....	84
Conclusions.....	85
REFERENCES.....	86

LIST OF FIGURES

FIGURE 1.1 A model of the coding matrix used in this research.....9

I would like to gratefully acknowledge the supervision of Dr. Gary Boyd whose time and efforts throughout this endeavor were appreciated immensely.

I would also like to thank my wife Maritza for her encouragement and support throughout this process. It is to her that I dedicate this work.

CHAPTER 1: QUALITY CONTROL IN DISTANCE EDUCATION

An Introduction to the Research Problem

Over the past few decades, interest in distance education has grown tremendously. The new terminology in this field includes such terms as e-learning, learning management systems, and distributive education among many others. Indeed there are those who feel that distance education, in conjunction with emerging digital technologies, will make the barrier of distance a barrier no more. This is a lofty goal, perhaps attainable as today distance education is already everywhere. From the ads posted on local billboards, to early morning television commercials, to the Saturday newspaper, we are showered with advertisements from post secondary institutions that offer individuals a wide range of distance educational options. But what of the quality of the educational experience being offered? How, and who, controls the quality of what is being taught? Indeed, do the institutions offering the instruction really know if they are presenting high quality educational experiences, and if so, how?

Research Question

“What are the dominant approaches to ensuring quality in the category of structural arrangements and practices, in Western post secondary distance educational institutions today?” In answering this question, this researcher has examined a number of the current published research resources in the area of quality of distance education, and attempted to synthesize the main themes of this research into a comprehensive and coherent form, for the benefit of the field in its entirety.

Published Research Situation

When one looks at the research surrounding quality in distance education, it becomes apparent that many post secondary institutional administrators and practitioners alike are continually searching for ways to improve the quality of their institutions' offerings. However, this search can be very difficult, as the research into distance education is vast, tremendously disorganized, and scattered throughout a great many literary sources. There exists a clear need to study these sources, and synthesize a clearer and more coherent picture of the field today, so that those in search of such strategies may better realize their individual needs.

The synthesis of scholarly sources plays an important role in dissemination of knowledge, and in the shaping of future research directions. With the plethora of information being generated by an unparalleled number of research publications, it soon becomes necessary for those who wish to conduct original research to be equipped with a road map with which they may find their way through what is known, in order to determine what still needs to be discovered. In the case of quality issues in distance education, a synthesis of the existing research is appropriate to promote a better understanding of where we are currently, and would certainly benefit educational professional practice in general.

There are many examples of refereed and scholarly publications in the realm of educational research which regularly publish works of narrative synthesis and critical analyses of educational issues. One such example is the Review of Educational Research. This journal publishes critical and integrative reviews of literature that have a direct bearing on educational issues. The editors of this publication believe that such

reviews should include not only the synthesis of literature and scholarly works, but also attempt to conceptualize and interpret them as well. (Review of Educational Research, 2002)

Another example of a journal that publishes synthesis and critical works in the learning domain is that of the Journal of Integrative Psychology. Articles submitted to this refereed journal must provide a broad overview of a particular area or issue, discuss theory, or debate issues that can be applied to practical and professional educational problems. (The Journal of Integrative Psychology, 2002) Hence there is a call for synthesis works, and this research, concerning distance educational quality issues, attempts to meet that specified need.

Importance of the Study

As discussed previously, with the plethora of knowledge sources available today, a narrative synthesis of the literature concerning quality in distance education would be highly valuable to both researchers and professionals of distance educational practice. Indeed, works that identify major themes, concepts, and gaps in the distance educational knowledge base, would greatly assist those who wish to design future research projects in the area. As well, this type of study is also useful to educational professionals in that it assists in categorizing the language commonly used in discussing quality in distance education, so that they may more easily discuss the more tacit points of the discipline, through the use of more standardized terms. Although this may sound very similar to a meta-analysis, or a systematic review, this work is not quantitative in nature, but rather qualitative, in that this language will serve to assist in the classification of universal themes.

General Delimitations Pertaining to this Work

The general scope of this research is to synthesize differing literature sources related to the research question, in order to determine if the adequate and effective mechanisms for quality control yet exist in the published literature. This study does not go to lengths as to try to explain why quality control methods are not being used, or why current strategies fall short, for that would go far beyond the research design and the resources at the disposal of this researcher. As well, the discussions chapter of this work is limited to suggesting directions and possibilities for future research in the area, be they along the same methods as those used here, or by using other methods as required.

The Balance of this Thesis

This work has been divided into six chapters. This, the introductory chapter, described the research question and gave the reader an overview of some questions concerning quality in distance education, and the limits set for this work. The following chapter provides an overview of the methodology used throughout this study, from the collection, coding, and synthesis of sources, to the writing of this manuscript. The third chapter gives the reader a general background to the topic of distance education, and defines the more common terms used in the distance educational quality debate. The fourth and fifth chapters contain the actual synthesis of sources. The fourth chapter deals with the managerial and operational aspects of quality in distance education, and the fifth chapter looks at the instructional, pedagogical, and service characteristics of quality in distance education. The final chapter, the conclusions section, critically analyzes the results, discusses the implications of the findings for the field as a whole, and speculates on any future research that may be stimulated by extending the existing research.

CHAPTER 2: METHODOLOGY USED FOR THIS STUDY

This chapter is intended to give the reader an overview of the research design and the methodology used in this work. The purpose of this study is to analyze and synthesize sources of existing literature that primarily and explicitly discuss quality in distance education, and identify the patterns and connections that are relevant to the more specified area of the structural arrangements and practices in devising, managing, and delivering distance education. As such, this research design fell into the category of being descriptive qualitative research, more specifically, a narrative synthesis.

There were four components to the research methodology of this narrative synthesis. The first element was the selection and delimiting the scope of works to be considered as sources. Secondly, the identified sources were collected, and it was determined if the source warranted further examination by virtue of having a direct relevance to the stated thesis question. Thirdly, the collected sources were coded, using an emergent process to identify the context, the major themes, and the findings of each work. Finally, the resulting data was analyzed and organized in a way that would facilitate a narrative style synthesis. These four components will now be further explained.

Selection and Description of Data Sources

Problematic to any comprehensive narrative synthesis is the selection of the individual literature sources for study. Which literature sources should be used? The sources used during this study included many well known education related journals that commonly deal with distance educational issues, and recently published books that comment on the topic. There were three delimiting factors used to restrict the sources in this work. First and foremost, they must not be considered Grey Literature; secondly, they must have

been published within a determined timeframe; and finally they must be widely available to the typical Canadian graduate student. The reasoning behind these specific source selection delimitations will now be explained in greater detail.

As the research into this area is as immense as the locations in which the sources may be found, imperative to this study are strict delimitations on the types of sources that were used. There are literally hundreds of Masters and Doctorial level theses, unpublished manuscripts, websites, and conference proceedings that could have been examined in such a study. These works, among others, constitute what is known as Grey Literature. Grey Literature refers to publications by governments, academic groups, and businesses, whether that publication is print or electronic in nature, but not controlled by commercial publishing interests, or where publishing is not the primary business activity of the organization. (Auger, 1989) The reasoning for this limitation is that Grey Literature publications are often non-conventional and non-permanent works that frequently do not undergo the rigors and criticisms of an independent review process. (Alberani, Pietrangeli, & Mazza, 1990) It is quite likely that new and exciting strategies of quality control in distance education can be found within the bounds of this area, however, due to the restricted time available for this study, it is essential to limit this study to permanent and accessible works that any academic would be able to easily acquire, should they wish to examine the source. Until electronic databases have progressed to the point where all Grey Literature is organized, searchable, and easily accessible, it is important to have such delimitations in the selection of synthesis data sources.

Second in importance regarding source delimitation is to limit the dates in which any selected resources were written. In this research project, the sources of data are limited in

linear terms from the date in which this publication was submitted, extending back until the year 1989. This date was specifically chosen based on the central importance of the computer in today's distance educational experience. Garrison (1989) defines the introduction of the desktop computer as the beginning of the third generation of distance education. This third generation differs from the first generation, which employed correspondence methods, and the second generation, which employed teleconferencing, by the widespread use of the desktop workstation. It was in 1989 that HTML Scripting and the 486 processor were invented, which allowed for this third generation to truly become a reality. (Garrison 1989) There are many that believe that we have since entered the fourth and perhaps the fifth generation of distance education. (Taylor, 1995) However, as the introduction of these scripting and hardware advancements could be considered the watershed of present day distance education, the selection of this date gives this research project sufficient breadth and depth, while at the same time deals with sources that address themes that deal with distance education's current realities.

Finally, it was the intention of this researcher to delimit literature inclusion to sources that are commonly available in most Canadian University libraries and collections. This "availability factor" was determined through the examination of online library search engines. Once a source was selected for scrutiny, it was then cross referenced with other major Canadian universities' library search engines to see if it is deemed widely available. The library databases used were those of the University of Toronto, McGill University, and that of the University of British Columbia. Journals published online were also considered to be widely available. Therefore, all works presented in this

manuscript come from books and journals that are either available online, or through these major universities, in either electronic or print form.

Collection of Data Sources

Data collection, during the course of this study was completed solely by this researcher. It consisted mainly of the acquisition of relevant but delimited literary works, which were then coded and synthesized. The sources themselves were collected in both electronic and print format, however when possible the electronic method was preferred as it greatly facilitated the expediency of the coding procedure.

As many of the selected sources dealt with similar topics, limits on data inclusion were applied. As sources were retrieved that dealt with similar themes, and that suggested similar best practice strategies, they were deemed to have reached the stage of data-redundancy, or data saturation. For the purposes of this work, the point of data saturation was reached when every new source collected, presented similar material, rather than providing another perspective to the research inquiry. When the point of data saturation was reached in a particular theme pertaining to the question at hand, no more works regarding this theme were collected. As the works found numbered into the hundreds, data saturation became frequent in the more common and well researched distance educational quality assurance themes.

Coding of Data Sources

The coding procedure undertaken here conformed mainly to the inductive method, where topical themes emerged from the ongoing coding of collected sources. After a data source was selected for inclusion in this work, a summary of the work was constructed in either an electronic or print format. A compilation of these summaries was

kept as a quick reference tool throughout the research process, primarily as a means of organization. Then, the process of coding, using an inductive and emergent process was undertaken. Data sets were read individually, and then content coded. This process was iterative in nature, and as new themes emerged, the previously examined data sources were reread to inquire if there were instances of this new theme that may have been overlooked in previously examined sources. If this was the case, the situation was rectified through the inclusion and coding of any new data.

There were two coding instruments used to assist in this emergent coding process, that of a primary matrix style organizational table, and a software assisted open coding scheme. The matrix table, used in conjunction with the aforementioned source summary constructs, was used for preliminary content coding and as the principal dividing mechanism of all sources into thematic groupings, including sub-groupings. A model of this basic coding matrix is shown in figure 1.1. After the sources were divided according to content, an open source of thematic coding was employed. This coding scheme was developed during the coding process, and used Microsoft Word's color highlighting feature to find and delineate concepts, metaphors, and key words by highlighting and tagging them, to allow for their organization and easy access.

Authors (Year)	Context of the Work	Data source & analysis	Major Findings	Relevant Themes and Quotes

Figure 1.1 Source Coding Organizational Instrument

Analysis of Data Sources

All collected and coded data included in this work was qualitatively analyzed in an attempt to determine the state of quality control in distance education, as per the stated research question. This analysis procedure was based on, and made significant use of, the coding tools presented above. This process could be likened to a grounded theory analytical research approach. A line by line analysis was undertaken that continually compared the coded data, in search of those elusive themes, and in search of authorial agreements and disagreements concerning those themes. The results of this analysis were synthesized, and were then subject to this researcher's interpretations and criticisms. These interpretations and criticisms were then written into the conclusions section of this thesis. Throughout the analyses, the inductive approach was used, and the decisions made with regards to data analysis were guided by the purpose of the synthesis, and the data's relationship to previous findings. As the primary goal of this research was to determine what quality control standards exist today, perceived deficiencies in the data were noted, and written into the results section of the final research report.

Potential Bias and Issues of Rigor

As a narrative synthesis can be seen as an arbitrary gathering and description of data, rigor and bias must be considered constantly so that a complete and objective synthesis can be constructed to the best ability of this investigator. It is hoped that the strict delimiting factors concerning source selection would enhance the rigor, validity, and reliability of this work. However, it is likely that many journals, books and articles may have been overlooked, and would contribute to the decline in the validity of this work.

Nonetheless, this could be seen as an unavoidable deficiency of not only this research type, but of research in general.

As well, it must be stated that a narrative synthesis is biased by nature, in that the sources selected and their selective interpretation is individualistic, and dependent on the background of this researcher, whose background lies primarily in the domain of educational professional practice, rather than in educational research. In addition, as this researcher worked alone in an emergent environment, inter rater reliability in this qualitative study was not viable. Therefore, this study was subject to bias with regards to background research, design of the study, coding of the data, and in the writing of the results section.

Concluding Observations

This chapter has described the selection, collection, coding, and the analysis of the data used in the production of this study. It was imperative to the validity of this work to describe this process in detail, and describe the underlying choices and reasoning used in this methodology, so that data source inclusion and exclusion could be defended against in a logical manner. As these sources and the methodology used have now been justified, it is the following chapter which examines the various terminologies and definitions encountered in these sources.

CHAPTER 3: TERMONOLOGY: DEFINITIONS USED OF DISTANCE EDUCATION, QUALITY AND THEIR RELATIONSHIPS

The definition of terms is an essential part of this research process, therefore it is now appropriate to define and discuss the two central terms of this research question in greater detail, those of distance education, and of quality. This chapter endeavors to do so, and is divided into two sections. The first segment discusses the terms “distance education” and “quality,” eventually settling on a definition used henceforth when employing each. The second section provides a broad overview of the interplay between these two terms within the educational domain.

Defining and Examining the Terms Distance Education

Holmberg (1977), Barker, Frisbie, & Patrick (1989), Taylor (1995), Moore & Kearsley (1996), Keegan (1996), Hickman (1999), and many others are commonplace names in the hunt for a definitive definition of distance education. Defining the words “distance education” may well seem strait forward enough, however distance education is not only a pair of terms, but a discipline in itself. As such, educational scholars are in search of a common definition that also allows for the provisioning of a working theory of distance education. Nevertheless, given the intention of this work, the construction of a working theory of distance education is not necessary. Rather a general definition of what constitutes distance education is sufficient for the purpose of identifying, discussing and synthesizing sources relevant to the research question.

After examining the works cited above, a definition of distance education has been synthesized, which will henceforth be referred to when the term distance education is used. Therefore, for the purposes of this work, *distance education will refer to any*

learning situation that meets three specific criteria. The first criterion is that a separation of teacher and learner, through either time and/or place, during the majority of each instructional process, must prevail. Secondly, the student must use of some form of learning medium that will allow him or her to complete the content of the specified course of study. Finally, there must be some method of communications exchange between the learner and the instructional agent, be that agent a professor, a teaching assistant, or in the case of instructional multimedia, the educational organization itself.

With a general definition of distance education synthesized, it is important to now briefly identify and explore the modes and models of distance education, and the post secondary providers that provide them.

Distance Education, Modes and Models in Post Secondary Provisioning

There are essentially two modes of distance educational offerings available through a number of post secondary institutions today. They are known as synchronous and asynchronous learning. Synchronous distance education refers to learning in which the instructor and student participate in the instruction at the same time. (Hickman, 1999) Two examples of synchronous distance education are video conferencing and online group chats. Asynchronous distance education takes place when instructors do not offer instruction to students at the same place or time. (Hickman, 1999) Two examples of asynchronous distance education are learning experiences using emails or videocassettes.

Distance education can further be broken down into three general models of education; independent learning, distributed learning, and open learning. Independent learning, as the name implies, places great emphasis on the students' ability to study on their own initiative. (Rumble, Harry, 1982, p 13) Examples of independent distance

education could include such instructional methods as how to, or step-by-step books, and distance educational television programming. That is not to say that this form of education does not include regular communications between the teacher and learner, however the student controls the pace, with relatively little in the way of time constraints. (Rumble, Harry, 1982, p 13)

Distributed learning is a form of distance education that allows the students and the teacher to be scattered over a number of areas. (Thone, 2003) Distributed learning can include some degree of independent learning with periodic synchronous meetings that can be either face to face, or use various forms of technology. More recently, distributed learning is being referred to as blended learning. Blended learning describes a vague combination of learning experiences consisting of multiple delivery methods of learning that teach students in the form most convenient and useful to them. Blended learning is instructor-led training, combined with distance educational techniques, using technologies such as email, conference calls, or voice mail. (Thone, 2003) This type of distance learning experience can best be seen with the offering of professional programs in education and nursing to Northern Canadian communities, where most of the course offerings are given through conference calling and emails.

Finally, open learning refers to distance educational offerings where admissions standards and start times are flexible. Those whom would not otherwise qualify for post secondary education are admitted and continue in the program if they show, through continued success, that they are able to succeed in a university setting. As well, open learning courses can begin at any point, as there is no academic year so far as scheduling is concerned. (Mackensie, Postgate, & Schpham, 1975, p. 15)

Distance Education, the Higher Educational Providers

An examination of established and legitimate universities offering distance education reveals that there are three types of distance education universities. They are open learning institutions, dual mode institutions, and specialized distance institutions. The first of this group are the open learning institutions. These post secondary providers deliver an educational experience to degree-seeking students, on a large scale. (Milheim, 2001, p. 537) Canada's Athabasca University is one such institution, where most undergraduate programs have an open admissions policy. The second grouping consists of the dual-mode universities. These universities combine courses taught at a distance, with the more traditional, on campus classes. (Milheim, 2001, p. 537) Brandon University is an example of a dual mode university, offering significant courses, and programs both at a distance and on campus. Of the 69 accredited universities in Canada, 42 fell into the category of being dual mode, as of 2001. Finally, there are the specialized distance educational institutions, which have a long term and significant tradition of providing education at a distance, using various correspondence methods. (Milheim, 2001, p. 537) The University of London's External Division, established in 1858 and having a separate governing body, could be considered a specialized institution.

It must be noted that perhaps these types of universities may be extended into another emerging category entirely, that of the "Meta University." A Meta University is an organizational partnership between a number of institutions which acts as a distance educational course broker, allowing students to take courses from any of those institutions and receive credit for degrees, diplomas, and certificates, from their host institution. (Graves, 1997, ¶ 42) We are currently witnesses to the emergence of

Canada's first Meta University, known as The Canadian Virtual University, a consortium of dual and open learning institutions. The members of the CVU allows those admitted into one of the member universities distance learning programs to study any of the courses offered by the participating universities, and receive accredited certifications, diplomas or degrees, based on these courses. With the definition of what constitutes distance education, and the modes and methods surrounding its delivery examined, we are now ready to turn our attention to discussing the term quality.

Defining the Term "Quality" for this Study

Berry (1997), believes that quality should be defined in terms of absolute standards, specified objectives and the end user feedback of a final product. (Berry, 1997, ¶ 21) Similarly, Fresen (2002) also believes quality is observed in the end results of production. Quality, he states, occurs when a product conforms to a number of pre-stated quality specifications, and has a minimum number of defects. In these stated circumstances, good quality is seen as being monetary value and overall customer satisfaction with a product's purchase. (Fresen, 2002, p. 29) But, what of the times when quality is not applied to the production of manufactured products, but in the offering of services?

Owlia and Aspinwall (1996) assert that the quality measures for services must differ from quality measures for manufactured products in that unlike a product, a service is intangible. (Owlia, Aspinwall, 1996, ¶ 6) They reason that in ensuring quality of service, the service provider must not only take into account the outcome dimensions of quality, but the process dimensions as well. To ensure quality of services, they believe that ongoing negotiations with the customer, regarding those services are imperative. Therefore, the quality of services is seen as being directly related to the extent that the

customer is a participant in the process. (Owlia, Aspinwall, 1996, ¶ 3) Trantin (2000) agrees with this characterization and believes that central to quality is the process, and that stakeholder involvement in this process is intended to bring the actual effect as close as possible to the expected effect. (Trantin, 2000, p. 18) This expected effect is furthered in Karapetrovic & Willborn's (1999) defining of service quality as the meeting or exceeding of customer requirements. (Karapetrovic & Willborn, 1999, ¶ 11) Yudof, Busch-Vishnlac (1996) second this depiction and believe that in offering a quality service it is critical to define your customers, listen to them, and respond to their changing needs. (Yudof, Busch-Vishnlac, 1996 p. 20)

Winn and Cameron (1998) combine these two approaches to quality in that they believe that quality of products and services have a similar foundation. This foundation is based on four premises; those of product quality, user quality, manufacturing quality, and quality of value. (Winn, Cameron 1998) The product's quality relates to the desirability of the product, which also applies to services. In other words, will the consumer come back for more? The user basis of quality highlights how the product or service meets the customers' needs, and the general satisfaction level of the buyer. Manufacturing based quality refers to how reliable the product or service is, when employed as intended by the producer. Finally, value based quality questions whether the consumer received value for the price of purchase. (Winn & Cameron, 1998, p. 495) This characterization of quality illustrates that although the form of the final output may differ, there are similarities regarding the quality of products and of services.

Many scholars believe that central to any complete definition of quality, is the provisioning of a means to measure it. This is often accomplished through the use of

quality benchmarks, or what are more commonly known as quality standards. Ashcroft & Forman-Peck (1996) believe that quality standards can be defined in two ways. The first is that quality standards are the normal expectations and ideas of products and services being above and below average, or if they meet a minimum performance standard. (Ashcroft, Forman-Peck, 1996, ¶ 30) Secondly, standards can be the result of an opinion, indicating a value judgment of an authority figure or body that may or may not indicate true quality. (Ashcroft, Forman-Peck, 1996, ¶ 30-32) Therefore quality standards are dependent on the bias of both internal and external forces exerting influence on the current situation. These forces can include such entities as government, employers, industry, management, teachers, consumers, and many others. Wherever there are interested individuals and groups who have a vested interest in the quality outcome of a product or service, there will be attempts to influence the standards by which quality is measured.

Given the discussions above, it appears as though quality for some depends on how well something is either produced or accomplished, and for others it involves the variety of stakeholder involvement in the process. As well, the definition of quality seems to have a certain dependency on the external and internal factors exerting influence on a particular instance, the needs and experience of the *evaluator*, and the goals of the end user. *Given these numerous descriptions of quality, the term, as used in this discussion, shall be defined as being a general consensus between interested and affected groups, that a product or service is meeting, or has met, any of the legitimate concerns and requirements of each group, so that each perceives the outcome to be as close to exceptional as possible.* With quality so defined, we shall now turn our attention to

describing established methods of ensuring quality, those of quality control, quality assurance, and quality systems.

Ensuring Good Quality

Today, ensuring quality of products and services has been turned into somewhat of a science. To illustrate this, a number of prominent thinkers have designed what is known as a quality pyramid, in the hopes of supporting the transition of quality theories into professional practice. This pyramid outlines a number of general methods of ensuring quality that many businesses and governmental departments use throughout the world. The components of this pyramid are quality control, quality assurance, and quality systems. (Freeman, 1991) It is at the base of this quality pyramid is where we find the component entitled quality control.

According to Freeman (1991), quality control implies the taking of action when products or services fail to meet minimally set standards. It is therefore a reactive approach to quality. (Freeman, 1991, 26) Juran and Gruna (1993) believe that quality control is largely directed at meeting quality goals which are, in effect, standards. In general, quality control is viewed as organizationally established rules and regulations intended to check a product or a service after it has been delivered to the client. If this product or service is deemed to be satisfactory, by quality control staff, then the product or service passes this test of quality. If the product or service does not pass quality control, based on the aforementioned rules and regulations, then the product or service is corrected to conform to the set standards. (Juran, Gruna, 1993)

Second in this pyramid of quality is the concept of quality assurance. Quality assurance is a planned structure of rules and regulations that attempt to ensure the output

of a quality service or product. (Fresen, 2002, p. 30) The key difference in describing quality assurance in comparison to quality control is that quality assurance is previously planned. This planning includes policy and procedures, based on data collected from both the producers and consumers of the product or service, that attempt to ensure a quality output. (Fresen, 2002, p. 30) Thus, quality assurance is not so much a reactive approach to quality, but a systematic procedure aimed at achieving quality output.

Third, or at the top of the pyramid, is the idea of a quality management system. A quality management system is a system that attempts to instill personal attachment and ownership of an organization's employees over its' products or services. This personal attachment, in theory, encourages pride in the workers, and should facilitate continuous improvement in the quality of their product or service. (Fresen, 2002, p. 30) In other words, the employees of the organization are committed to quality improvement, in that they have a personal interest in the success of quality measures, and feel personally responsible for any failure. (Yudof, Busch-Vishniac, 1996 p. 21)

Usage of the methods illustrated in this quality pyramid is dependent on what the quality intentions are; to improve the current level of quality of a service or product, to maintain the current quality status, or to improve issues related to quality. These intentions depend on those who control the quality process, the interest groups involved in that process, and the goals of that process, juxtaposed against the knowledge that those control agents have about the quality methods. Thus, with a working definition of quality, and a background on how it is often ensured, we will now examine the common elements of quality when discussing the educational experience.

Quality in Education

The pursuit for quality is a chief concern of both distance and traditional academic institutions. Many of these concerns are often expressed through stakeholder inquiries into various institutional accountabilities, such as cost-effectiveness, faculty selection, learning material ownership, and information security. (Charp, 1998, p. 4) It is in this section of chapter three where we will discuss quality as it relates to both traditional and distance post secondary education, highlighting some of the quality assurance methods employed by each.

Discussing Quality Descriptives in Traditional and Distance Education

Some of the more commonly used terminology used by academics when describing quality tends to be situationally relative and ambiguous, however generally fall into three categories, those of quality of inputs, quality of processes, and quality of outcomes. Fresen (2002) describes quality in education in relative terms, using the words, exceptional, transformative, innovative. Quality as exceptional, indicates exceptional standards, attained when the input components of staff and students themselves are exceptional. Quality as transformation refers to the output related overall improvement of students. Finally, quality as innovation enhances the curiosity in students to insure that the customers as outputs return for more of that institution's products or services. (Fresen, 2002, p. 29)

Ashcroft and Forman-Peck (1996) describe quality in education in terms of excellence, and fitness for purpose. Quality as excellence refers to inputs, processes and/or products that are "above average" in quality. (Ashcroft, Forman-Peck, 1996, ¶ 18) Branson and Buckner (1995) also use the term excellence, and see educational excellence

as output related. They perceive excellence as being the percentage of students meeting their individual graduation requirements, and the percentage of students who successfully pass the assessments of the professional work related world. (Branson, Buckner, 1995, p. 20)

In their defining quality as fitness for purpose, Ashcroft and Forman-Peck (1996) believe quality in education to be process related, in the efficiency and effectiveness of the system. This efficiency and effectiveness is measured against institutionally defined aims and outcomes, and that each process contributes to these aims and outcomes. (Ashcroft, Forman-Peck, 1996, ¶ 20) Colling and Harvey (1995) echo these notions in that they see as being of most importance, with regard to quality as fitness for purpose, is if the stated quality goals were achieved in a cost efficient manner. Branson and Buckner (1995) also deem quality as process related, and define educational quality as a set of processes that assure the institutions in question will produce graduates that will be capable in and knowledgeable of the discipline they have studied. (Branson, Buckner, 1995, p. 19) Although these terms are situationally relative, they are commonly used in describing the inputs, processes, and outputs of quality assurance in distance education.

Comparing Issues of Quality in Traditional and Distance Education

The vast majority of comparison research between distance and traditional educational quality clusters around the comparison and contrasting of instructional delivery methods, and the evaluation of those methods for output based significant differences. (Berge, Mrozowski, 2001) There is also an emerging interest in the use of distance educational methods of communications in traditional classrooms in the hopes that overall quality can be enhanced through their usage. In addition, there is also a general interest in the

similarities of the quality management techniques used at the institutional level. (Welsh, Dey 2002)

One major difference between the literature surrounding traditional and distance educational quality is that distance education is less focused on evaluating quality outcomes and more focused on organizational quality. (Hendrix, 1992) As students in distance environments cannot clarify directions or solve problems in person, the organization of information must be more easily accessible to students to ensure their overall success. (Henderikx, 1992 p. 36) As well, distance educational institutions are generally more focused on the validity of their product as there is more concern with the fulfilling their academic mission, which is often a different mission than that of a traditional institution. (Henderikx, 1992 p. 34)

Assuring Quality Through Accreditation, Assessment, and Auditing

Quality assurance in any educational setting is a necessity for the confidence level of the general public so that they feel comfortable in the belief that the objectives and outcomes of the institution in question are being met. (Lezberg, 1998) There are numerous factors that must be monitored in any post secondary educational situation to assure quality. These factors include the student selection process, the monitoring of student progress, and the provisions for measuring educational outcomes, to name a few. (Lezberg, 1998 p. 30) These factors are often monitored through what is known as the process of quality assurance. (Ashcroft, Forman-Peck, 1996, ¶ 3) The three basic methods of quality assurance now used in both traditional and distance based education are termed assessment, accreditation, and academic audit. (Dill, Massy, Williams, Cook,

1996 p. 20) We will now further examine how quality is commonly assured through the employment of these three methods.

Traditionally, accreditation has been used to assess the value of a credential conferred on the graduating students of an institution, to ensure at least a minimum standard of quality in relation to similar institutions. (Dill, Massy, Williams, Cook, 1996 p. 21) Accreditation is most commonly earned by an institution, from an accrediting body, and is valid for a certain timeframe, after which the institution must again undergo the accreditation process. This process normally consists of three stages; a self study by the institution, a visit to the institution by external peers who verify the self study and report on it, and a review by the accrediting body of this report to decide if accreditation is warranted. (Lezberg, 1998 p. 29) Today there are hundreds of accrediting agencies, some of which leave much to be desired. (Abernathy, 2001, p. 20) Because of this, accreditation is no longer seen as sufficient to assure the quality of any academic institution, and must be used only in conjunction with academic assessment, and audit. (Dill, Massy, Williams, Cook, 1996, p. 21)

Academic assessment refers to a number of measures of effectiveness and efficiency as defined by the more powerful stakeholders in post secondary education. These stakeholders can include such entities as the institution's funding groups, including government and private business, and academic representatives, such as associations of professional practice. (Ashcroft, Forman-Peck, 1996, ¶ 4) Quality assessment is intended to demonstrate the extent to which students have acquired the knowledge and skills considered necessary to the program in question, and to maintain conditions that allow the students to achieve the desired academic outcomes. (Neilsen, 1997 p.288)

Academic assessment is accomplished through the office of an external managing agent, independent of institutional and government politics. It is this managing agent who periodically calls for these assessments, which can consist of both internal self-assessments, and external peer assessments. These evaluations are not limited to the educational quality of an institution, but also include academic research quality as well. (Dill, Massy, Williams, Cook, 1996 p. 21) Upon completion of any internal or external assessment, the methodologies, as well as any findings, are then made available to the stakeholders for consideration. (Van Vught, & Westerheijden, 1994, p. 366)

Finally, we must consider the academic audit as an integral part of the quality assurance process. An academic audit is an in-depth examination and verification of the inputs, processes, and outputs of an institution. An academic audit can be carried out either internally or externally to the institution, depending on the level of validity required for those instigating the audit. Dill, Massey, Williams and Cook (1996) determine that there are five areas examined in the process of an academic audit. They are; curriculum design, pedagogical design, implementation of quality, outcomes, and resource provisioning. The auditors determine if students' needs are being met in these five areas, through a variety of individual methodologies, and also determine if any changes are needed to improve overall quality. (Dill, Massy, Williams, Cook, 1996 p. 23)

Where to From Here?

As we can see, there are many similarities in describing and ensuring quality between traditional and distance education. However there are also subtle differences between the two. The literature surrounding quality in distance education is centered around two specific themes. The first of these themes can be classified under the headings of

managerial and operational issues of quality. The second theme deals with issues concerning the pedagogical, cultural, and the service issues of quality. We will now move to synthesize the literature concerning the managerial and operational themes of ensuring quality in distance education.

CHAPTER 4: MANAGERIAL AND OPERATIONAL ISSUES OF QUALITY CONTROL IN DISTANCE EDUCATION

Quality initiatives in distance education must be introduced, monitored, updated, and evaluated for effectiveness and efficiency. As the primary agents of leadership and change, it is the institution's management and administrative structure that is responsible for the supervision of these initiatives. This chapter will focus on the literature concerned with the supervision of quality initiatives by distance educational management and administration. We begin with a discussion of the interplay between a distance learning institution's long term philosophies, and missions, and their shorter term quality objectives and goals, and how these factors impact institutional quality policy and planning. Next, an overview of the human resources factors related to improving quality in distance education is made, through first discussing the employment of quality staff and teams, and secondly by outlining the traits and training required to ensure distance academics and staff members will enhance overall institutional quality. We then turn our attention to the literature concerned with how to manage for quality, through proper supervision of financial matters, and through internal quality monitoring, and how an institution can reap the benefits of quality initiatives through common methods of marketing quality. Finally, a brief overview of the use of established quality management systems in distance education is made.

Distance Institutional Philosophies, Mission, Objectives and Goals Vis-à-Vis Quality

Before any quality initiatives can be undertaken, distance educational institutions must have a firm definition of their overall philosophy and mission. (Galbraith, 1997)

Normally, the philosophy and mission of a distance institution is relatively static, and are

decided upon by a wide range of institutional stakeholders. The philosophy and mission of a distance learning institution normally identifies the area of excellence of the institution, its purpose, and its target clientele. (Galbraith, 1997, p. 22) Overall, the philosophy and mission forms the foundation of a distance learning institution, on which all other institutional factors are built, including quality. It is the responsibility of management and administration to appropriately articulate the institutions' philosophy and mission, in relation to quality, and to effectively communicate them to the institution and the public at large. (Galbraith, 1997, p. 22)

The quality goals and objectives of any distance learning institution are more short term, and more dependent on external factors. To properly articulate these shorter-term goals and objectives via quality, administration must first plan and present a quality strategy. To develop an effective quality strategy in distance education, Carter (1996) puts forth a number of essential concerns that any distance administrator must address. He believes that administration must conduct periodic needs assessments to evaluate the need for present and future distance offerings at the institution in question. They must estimate the costs of programs and courses, both present and proposed. They must identify any faculty concerns, such as media formats to be used and training. Finally, they must estimate the potential for student's success within the course or program. (Carter, 1996, p. 128) Any quality goals and objectives decided upon must also be compatible with the organizational philosophy, and mission. (Galbraith, 1997, p. 22) With such an assessment completed, these shorter term goals and objectives can then be written into what is known as a distance institutional quality policy.

Distance Institutional Quality Policy

Any short term quality goals and objectives planned must be written into what is known as an institution's distance educational quality policy. A distance educational policy on quality must be designed, beginning with the ultimate goal in mind, which is always to provide the students the best environment for learning, regardless if the institution is open, dual-mode, or specialized in nature. (Alexander, 2001 p. 241)

Furthermore, consideration must be given to identifying and assessing student needs and interests, which include matters such as, registration, financial aid, library services, advising, and credit transfers, among many others. (Milheim, 2001, p. 537) Faculty considerations in any quality policy must also be examined, and include matters such as training in techniques of distance education, course release, class size limits, tenure, and union matters. (Milheim, 2001, p. 537) Finally, managerial and administrative decisions concerning quality must be included in the institution's quality policy. They must articulate and document factors such as program and course costs, distance delivery methods, staffing, and any partnerships activities with other institutions or agencies. (Galbraith, 1997, p. 22) To be effective, any policy on quality must also take into account the concerns support staff. Interviewing support staff, both formally and informally, valuing and respecting people, and insisting on clear quality requirements are needed to ensure a quality culture begins to take root throughout the institution. (Berry, 1997, ¶ 3)

When the quality policies are decided upon, ongoing support from administration and management for those initiatives is imperative, as it is these individuals who set the tone of quality for the institution as a whole. Support must come from all levels, from the

senior administration, which provides the university with overall policies on quality, to the department heads, which provide information on policies and issues such as proper teaching, methodology, and tenure. (Milheim, 2001, p. 538) It is the role of these individuals to share information on quality, plan for quality, and put into everyday context any quality goals. (Colling, Harvey, 1995, ¶ 14)

Evans (2000) highlights a list of common areas of neglect that are often overlooked by administration when attempting to implement quality initiatives in distance education. These areas include a failure to provide recourse for staff and student complaints, a failure to provide good management of quality initiatives, and failure to follow the general and legal policies of the institution in question. He believes that the end result of a failure by senior administration to address concerns such as the aforementioned will be a decline of quality, and perhaps the failure of the distance provider itself. (Evans, 2000, p. 15)

What has been discussed here could be labeled quality leadership. Without proper and effective leadership and direction, there can be no quality in distance education, as it is their role to establish direction and inspire people to keep moving toward quality goals. (Galbraith, 1997, p. 23) At the same time, without academics and a support staff committed to quality, mandated quality initiatives will not be successful. (Galbraith, 1997, p. 23) With the issuance of quality policies examined, we now turn our attention to the literature concerning the development of an institutional quality culture, through the use of quality facilitators and teams.

Cultivating Quality Through the Use of Quality Facilitators and Teams

With institutional quality plans and policies articulated and issued, they must then be implemented. Implementing quality in educational planning is a social activity, and the quality policy agreed upon must reflect the social and organizational context of the institution in question. (Yang & Cervero, 2001, p. 289) This social activity is carried out at the individual level, in conjunction with specialized team initiatives to ensure the building of a foundation of quality within the institution. (Galbraith, 1997, p. 23) Therefore, we will now look at the literature surrounding the introduction of quality facilitators and quality teams into distance educational environments.

Quality Facilitators, the Quality Champion

Willborn and Karapetrovic (1999) advocate the creation of a position or positions within a distance university, whose primary responsibility would be to facilitate the quality assurance efforts of that institution. They term this staff member a “champion of quality.” (Willborn, Karapetrovic, 1999, ¶ 25) The quality champion is a full time position, and involves activities such as searching for gaps in current quality initiatives, and informing employees of quality regulations and procedures. Willborn and Karapetrovic (1999) believe that the quality champion should come from the ranks of the institution’s current academic staff, to better facilitate communication between academics and management. (Willborn, Karapetrovic, 1999, ¶ 27) Proper use of quality leaders such as quality champions has been shown to increase the level of motivation and communication between the two groups, thereby increasing overall quality within the institution. (Lee, 2001, p. 153-160)

Quality Teams, Quality Steering Committees and Buffer Groups

Oliver, (1996) offers the idea of increasing cooperation both within the institution, and between the institution and external stakeholders, through the establishment of an executive quality steering committee that would oversee institutional quality improvements. The primary duties of this group would include the promotion of awareness of quality policies through the training of staff on quality initiatives, and to communicate quality improvement procedures to internal and external stakeholders, through the publication of quality newsletters. (Oliver, 1996, p. 9) Leading this steering committee would be a quality facilitator, similar to Willborn and Karapetrovic's (1999) quality champion, whose primary duty would be to mediate between the steering committee, and the institution's personnel. (Oliver, 1996, p. 9) Penington (1998) presents a strikingly similar concept to that of Oliver (1996) in that he suggests the creation of a buffer body between management and external stakeholders that would assist in the mediation of quality concerns between both groups. (Penington, 1998, p. 269)

Quality Teams, Self-Management Teams and Quality Control Circles

Navaratnam and Whitley (1993) suggest that quality of an educational institution can be enhanced through the creation of what they call self-management quality improvement teams, located at the departmental level. These self management teams ensure the quality policies of the university are being accommodated within the department, and articulates the quality concerns of academics and support staff to management and administration. These self-management teams consist of a facilitator, a team leader, and voluntary team

members. As cross departmental employee participation is needed in such a structure, team members in such a scheme are taken from all ranks of that department's academic and support staff, to ensure participatory management in the quality assurance process. (Navaratnam, & Whitley, 1993, p. 25-27) These teams would be a visible self-regulating body, which Navaratnam and Whitley (1993) believe would further enhance academic and service quality.

Ho and Wearn (1996) offer a tool similar to that of self-management quality teams, in their presentation of the practice of implementing quality control circles. Differing from self management teams, a quality control circle is focused on the systematic quality maintenance of the workplace and the efficient usage of institutional materials and equipment. These materials can include everything from paper resources to computing facilities. (Ho, Wearn, 1996, p. 179) Like quality self management teams, the members of the quality control circle are selected from across the ranks of the academic and support staff, the main difference between the two being that one is concerned with the management of human resources and the other is concerned with management of physical assets.

Quality facilitators and quality teams can be important components in ensuring quality in distance educational institutions at the management and administrative level. Proper employment of quality leadership positions, such as that of a quality champions, and the use of quality teams, such as quality steering committees, self management teams, and quality control circles, can be effective in improving overall communications, resulting in a better quality experience for all institutional stakeholders. As we have now explored the literature concerning quality enhancement through the use of quality leadership and

team structures, we must now turn our attention to the enhancement of overall quality at the individual level, that of the lone academic and support staff member.

Ensuring and Cultivating Quality of Academic and Support Staff

It is the responsibility of management and administration to recruit employees that will be committed to quality initiatives, and to offer professional development regarding quality initiatives to academic and support personnel. As it is the academics and support staff of any distance institution that in fact apply quality measures in their day to day activities, it is of utmost importance to ensure that these individuals are both of a quality nature, and satisfied with the level of supports they receive. Consequently, we now examine the literature concerning the assurance and cultivation of quality in the support staff and academics of distance educational institutions.

Ensuring and Enhancing the Quality of Distance Educational Support Staff

The literature surrounding the assurance and enhancement of quality of distance educational support staff reveals that there is often a deficiency in the level of performance incentives offered, and as a result, quality often suffers. Proper planning in this area is essential for the continued feasibility of any distance learning institution. First and foremost, all support staff must be adequately instructed on institutional quality concerns, policies, initiatives, as well as their individual roles in these initiatives. (Milheim, 2001, p. 538) In addition, all staff must have their intrinsic motivational needs considered on an individual basis, and made to realize that their contributions assist in overall institutional quality. They must also be adequately compensated, and be made aware of any intangible rewards offered for their increased efforts to assure quality. (Wolcott, 1997, p. 34) Finally, one of the most important but overlooked considerations

in assuring a quality distance educational staff is the incorporation of a policy concerning workloads. At times, management and administration are uninformed or neglectful of the extra time required to offer courses and student services in a distance environment. A properly formulated workload policy will ensure a contented support staff, more open to any quality initiatives. (Alexander, 2001 p. 245)

Ensuring and Enhancing the Quality of Distance Educational Academics

The literature concerning the assurance of quality academics focuses on the hiring of individuals with appropriate credentials, and in appropriate professional development. In distance education, recruitment of competent individuals is not always possible, especially as many distance educational institutions are competing with traditional academic employers for the same pool of individuals. Many potential distance academic staff members are apprehensive of entering into a career in distance education, fearing the technology, and the added workload distance courses require. (Milheim, 2001, p. 537) Because of this and other factors, distance institutions rely more heavily on short term and part time staff, a fact that often adversely affects quality. It is the responsibility of administration to work with present and potential staff to alleviate and deal with these concerns, to ensure the academics are of a quality nature. (Bridges, 2000, p.39)

Proper credentialing alone does not ensure that the academics hired will be competent distance educators. They must possess certain traits that will facilitate their future success in distance education. Thach and Murphy, in a 1995 study, identified the top ten traits that enhance the chances of success of academics teaching at a distance. These ten competencies include "...Interpersonal Communication, Planning Skills, Collaboration, Teamwork Skills, English Proficiency, Writing Skills, Organizational Skills, Feedback

Skills, Knowledge of Distance Education Field, and Basic Technology Knowledge.”

(Thach, Murphy, 1995, p. 57) Based on this study, they deduce that technical knowledge can be learned at a later date however the possession of broader skill sets, such as interpersonal communications and teamwork skills more often leads to higher quality distance educational teaching. (Thach, Murphy, 1995, p. 57)

Goodman, Salmon, Specter, Steeples and Ticker (2001) discuss the occupational differences of academics when they teach at a distance when compared to the traditional classroom. They believe that to offer a quality experience, a professor must be more than an educational facilitator. They must also be an advisor, advising students on how to succeed in distance environments, an assessor of distance learning situations to ensure appropriate student evaluation, a technologist capable of effectively communicating at a distance, a distance course designer, understanding the mechanics of the course design process, and a researcher of current and future distance educational issues. (Goodman, Salmon, Specter, Steeples & Ticker, 2001, p. 65-69) It is this final issue that Goodman, Salmon, Specter, Steeples and Ticker (2001) raise which will have much impact on a distance institution's reputation concerning quality, as in distance educational environments it is becoming more common for online works to replace textbooks, which could create interesting challenges in evaluating scholarly output at these types of institutions. (Armstrong, 2000 p. 25)

Professional development of academic staff plays a central role in the enhancement of quality at any distance learning institution. (Marshall, 1998, p. 321) However, often this professional development is shorted by management and administration in favor of purchases of technology and software. The general rule of thumb in distance education is

that nor more than 50% of financial and time based resources should be devoted to hardware, no more than 25% should be devoted to software, and not less than 25% should be devoted to faculty training. This type of ratio will ensure not only a level of quality with regarding new technology, but a level of quality in academics who know how to maximize its use. (Major, Levenburg, 1998, ¶ 11)

Milheim (2001) believes that one of the most effective ways to offer professional development to distance educational academic staff is to provide them with guides and information on the offering of quality distance educational instructional techniques, distance educational technology, and recent research into the distance educational field. (Milheim, 2001, p. 540) Alexander (2001) however believes that this type of passive professional development is lacking and asserts that academics must also be exposed to distance educational methodologies, through seminars and workshops, to ensure a well rounded knowledge of how students learn in this type of environment. He also advocates academics being given appropriate time release, to research their specific discipline in relation to distance education to enhance quality. (Alexander, 2001 p. 241-245)

It is not only the hiring of appropriate staff and the professional development of that staff that will ensure quality. Faculty must accept and believe in the quality initiatives management and administration is putting forth. In one study of academic attitudes concerning quality improvement plans, Tovey (1992) discovered that there were many barriers to these plans, which often stemmed from a lack of general communications. These main barriers to acceptance of quality improvement centers on the fear that academics will lose their independence and that they will be forced to implement policies with which they fundamentally disagree. (Tovey, 1992, p. 138)

Aside from individual concerns with the implementation of quality measures, Lee (2002) believes that it is not only a lack of communications that can affect quality initiatives, but also a lack of instructional design and support services offered to faculty. (Lee, 2002, p.33) Landstorm (1995) confirms this concern and asserts that many professors fear that their improper use of distance learning technologies and instructional techniques will lead to a lack of interaction between the students, thus lowering the quality of the overall educational experience. (Landstorm, 1995, p. 155) When faculty is uncomfortable with the support received when dealing with technology, they tend to be less motivated and satisfied with their teaching. Quality can be improved when this lack of support is corrected by management. (Lee, 2002, p. 58)

Ensuring and Enhancing the Quality of Distance Educational Teaching Assistants

Often teaching assistants are employed by distance universities in the delivery of the final course product. The distance educational teaching assistant, or tutor, differs from the professor in that their role is to act as a guide to the students, through their exploration of the course materials. (Granger, 1990 p. 50) To ensure quality, distance educational tutors must possess a number of skills which Jeengut (1998) believes can be taught using their distance tutor training model. This training model consists of three components. The first is an initial briefing that highlights the policies and procedures concerning the tutor's new position. Secondly, a face-to-face discussion between new and more experienced tutors is arranged where they can share their knowledge and experiences. Finally, a tutor manual is constructed and given to the tutors to ensure that they are made aware of how to ensure quality in a distance learning environment. (Jeengut, 1998, p. 22)

It is through the constructive thinking of management and administration of distance institutions that the overall quality of academic and support staff can be enhanced. This enhancement creates a general culture of quality improvement in the institutions in question. With the literature regarding the quality development of academics and staff overviewed, we now turn our attention to how management and administration can enhance distance educational quality, through the use of proper accounting methods, the use of internal quality monitoring techniques, and finally, how they can reap the rewards of quality initiatives through their use as a marketing tool.

Accounting, Monitoring, and Marketing, Quality in Distance Education

Management and administration are directly responsible for factors concerning the accounting, monitoring, and marketing of quality in their respective institutions. In distance education today, institutions are faced with the emergence of a market-based distance educational environment where corporate universities, educational publishing companies and technology companies are competing for market share, providing students with what they need, when they need it, at reasonable prices. (Olcott, 1996, ¶ 25) This scenario has implications for post secondary distance administrators in the areas of financial return on investments, marketing, and evaluating competitive advantage. The literature examined here articulates ways management and administration can enhance quality in these areas, to ensure the continued viability of their distance institutions into the future.

Accounting Methods to Ensure Quality in Distance Education

Budgeting and the accounting of expenditures of distance educational offerings are a powerful quantitative resource with many quality repercussions. Trantin (2000) believes

that the use of cost benefit ratios can help administrators estimate the general return on investment one method of distance education offers over either a traditional academic environment, or over other methods of distance delivery. The simplest cost benefit ratio is that of a division of total costs, by that of the number of students, or graduates in a particular course. The variables of this ratio can also be expanded to include direct or indirect costs, to obtain either a total cost or average cost per learner. (Trantin, 2000, p. 23)

A more accurate tool used to measure quality output is an accounting of the return on quality (ROQ). Return on quality is a concept that extends the measure of quality returns to a more tacit level, and demonstrates quality returns through a more efficient and effective delivery of a distance educational product that better satisfies the institution's customers. (Weller, David, 1996, ¶ 5) Return on quality is intended to demonstrate increased efficiency by highlighting reduced costs, and increased effectiveness through better organization and communications. (Weller, David, 1996, ¶ 27) Trantin (2000) expands on the return on quality measure with the concept of the cost-quality ratio. This measurement evaluates how better communications between the academics, course design teams, and support services, results in a higher quality course offerings, and how this effects overall costs. (Trantin, 2000, p. 22) One example of a cost quality ratio is a value chain analysis. "A value chain analysis is based on the assumption that every activity performed within an organization adds some value to the final goods or service which that organization produces. The final output is simply the aggregate of values contributed by organizational activities and resources." (Viljoen, Holt, & Petzall, 1991, ¶ 26) The value chain analysis is an accounting of the activities, skills, and resources

associated with the institution's sales, service, marketing, logistics, human resources, and management. Each of these groups must demonstrate that they are maximizing the fiscal value of their daily inputs. The focus of a value chain analysis is on the end user, and verbally or graphically shows how each member of the institution adds value to that final product. (Viljoen, Holt, & Petzall, 1991) These fiscal measures of quality are quantifiable in that a reduction of costs to the consumer is central, however they are also qualitative in that the evaluation of increased interactivity and focus on quality is subjective in nature. (Viljoen, Holt, & Petzall, 1991)

Ongoing Monitoring of Quality in Distance Educational Institutions

Although distance educational management and administration is often occupied with issues of accounting, there are many other monitoring methods that can be used to gauge the level of success internal quality initiatives have produced. The more formal methods of monitoring quality previously mentioned, those of accreditation, assessment, and audit, are not practical tools for monitoring quality on a weekly or monthly basis. The literature provides management and administration many techniques for monitoring quality at much more regular intervals. We will now look at these sources, first by discussing the literature surrounding quality standards, benchmarks, and performance indicators in distance education, then moving to student evaluation as a method of collecting information to improve quality, and finally we examine the use of computer based quality management systems.

In business, the terms standards and benchmarking are often used in quality measurement and evaluation, while in distance education, it is more common to encounter the term performance indicator. A performance indicator is a measurable

criterion that can be used to determine if a process or a method is performed correctly in an academic institution. (Kaufman, 1998) Shale and Gomes (1998) further this general description of educational performance indicators by stating that their main function is as an accountability tool that measures what is expected of the institution in question, how it is done, and how efficiently it is accomplished. (Shale & Gomes, 1998, ¶ 8)

Shale and Gomes (1998) give examples of performance indicator measurement tools that can be applied to distance educational institutions. For example, what is termed the participation access indicator can be used to indicate the numbers of students applied, registered, and assessed, as well as their status as part-time or full-time students. The student satisfaction indicator can be used to collect data to assess if students are happy with the quality of the course, and their service of delivery. There are several other performance indicators offered by Shale and Gomes (1998) such as the employment indicator, the employer satisfaction indicator, the research indicator, and an economic impact indicator. (Shale & Gomes, 1998, ¶ 1-14) The common element of each of these performance indicators is that they involve the distance educational provider defining their own ideal standard, and identifying through this standard, the data that they believe would be most useful in assessing quality. The use of these performance indicators is much more difficult in distance education than in traditional education due to the many differing methods of instructional delivery and instructor/student communications. (Shale & Gomes, 1998, ¶ 1)

Of fundamental importance in evaluating distance institutional quality is the ability to observe and to evaluate the level of student satisfaction with the quality of teaching they receive. Often, this takes the form of a brief end of course quality assessment

questionnaire. (Long, Tricker, Rangecroft, and Gilroy, 2000) Long, Tricker, Rangecroft, and Gilroy (2000) have expanded this idea and constructed an interesting pro forma that allows students to, before their studies begin, document what they expected from their learning experience, and compare this to what transpired during the timeframe in question. These results are then inspected through traditional statistical analysis, in the hope that in the future, the quality of student experiences can be improved. (Long, Tricker, Rangecroft, and Gilroy, 2000)

Coffey (1992) takes the methods presented by Long, Tricker, Rangecroft, and Gilroy, (2000) in a parallel direction in that he believes true quality in distance education is achieved when the student's expectations are met by way of the student and teacher agreeing on their expectations for a course and then designing the course appropriately. (Coffey, 1992 ¶ 6) Stevenson and Sander (1998) offer an fascinating method of improving quality based on this notion. They suggest that an iterative gathering and evaluation of student expectations, before the course begins and throughout the course increases the overall quality of the course. (Stevenson & Sander, 1998 ¶ 1) This is indicative of the now common reflective practitioner model of teaching, in which a constant stream of feedback is integrated, by the teacher, into the quality and direction of the remainder of the course. (Stevenson & Sander, 1998 ¶ 4)

Traditional faculty who move to distance educational environments must make major changes in the way they teach. (Milheim, 2001, p. 538) Indeed, teaching style is most visibly affected in that the design of distance learning courses and materials often lie outside the requirements of many distance educational instructors. As a result, many faculty members assigned to teach at a distance understand their responsibilities as

instructor to be limited to covering these prepared materials. Instructors must understand what is expected of them, and use this information to enhance their teaching methods in distance domains. (Weigel, 2000 p. 14)

For all of the means and methods of collecting information to evaluate quality, the information is useless if it is not assembled and organized in such a way that it can be made use of by administration and management. Most often institutions manage their quality data through the use of what is known as a quality measurement system. This system is often nothing more than a relational database system, into which quantitative information concerning quality is imputed. Current quality measurement systems can be used to perform advanced statistical analysis, and assist in strategic planning, budgeting, and outcomes assessment, at any distance learning institution. (Welsh, Dey, 2002, ¶ 1)

The most common drawback of implementing such a system is with the difficulty of inputting qualitative information in such a way that it can be useful to administration. This however is not an issue of quality, but an issue of technology that is not only being experienced by those in the educational field, but throughout the business world as well. (Welsh, Dey, 2002, ¶ 1-6)

We will now turn our attention to the literature that discusses how management can enhance prestige for quality initiatives, through the marketing of quality.

Marketing Quality in Distance Education

Today, marketing can determine the ultimate success or failure of any distance program, a fact which administrators and managers are well aware. (Galbraith, 1997, p. 23)

Viljoen, Hold, and Petzall (1991) suggest that quality can be used as a marketing tool to gain a competitive advantage. They feel that a competitive advantage can be achieved

in three main areas, by offering the best quality for the lowest cost, by focusing on a particular market, and finally by differentiating the course offerings in a way important to the niche market targeted. (Viljoen, Holt, & Petzall, 1991, ¶ 6) The creation of a marketing tradition around these areas of competitive advantage could be used to create the notion that the distance institution in question is a leader in its' field.

Mowen and Parks (1997) also examine the role of quality in determining appropriate marketing strategies for educational offerings. They have constructed a strategic market planning scaffold, for use by administrators and management, which is comprised of three basic steps. First, institutionally specific indications of quality are identified. Then, the distance institution in question performs unbiased researches into its' own competitiveness and market attractiveness, when compared to other institutions. Finally, a quality marketing model is designed that will highlight these institutions' quality strengths and competitiveness in the hope of carving a market niche in certain distance educational domains. (Mowen & Parks, 1997, p. 28) This strategic market plan also involves many sub-steps, such as defining the institutions target market, defining future directions of the institution, however well developed institutional goals and objectives should assist greatly in defining these factors. (Mowen & Parks, 1997, p. 28)

Quality Management Systems in Distance Education

With the accounting, monitoring, and marketing of quality in distance education overviewed, we now turn our attention to the use of quality management systems in distance institutions. "A quality management system is a combination of resources and a management processes that function together to reach specified objectives. The elements of such a management system are described as 'holons' a combination of the Greek

words ‘holos,’ which means whole and ‘on’ meaning part.” (Willborn, Karapetrovic, 1999, ¶ 6) Holons are the identifiable independent subsystems that, when taken together, comprise a larger working system, such as cells in a human body, or the major components of a car. (Willborn, Karapetrovic, 1999, ¶ 6) While hierarchical systems are static, holonic systems are not, which increases the flexibility of the entire system. This increased flexibility allows problems to be solved more quickly and efficiently. The popular matrix organization of today is constructed using the holonic method. (Ashcroft, Forman-Peck, 1996)

Perhaps the most well known quality management system in educational administration would be that of the total quality management system, or TQM. A total quality management system, when employed in education, is a management system that strives to satisfy all internal and external stakeholders of the institution, through the creation of a culture of continuous quality improvement. (Williams, 1993, p. 229)

Although the history of total quality management in business is well documented, it is not possible to determine when this system was first applied to education. Williams (1993) can highlight four routes that TQM took into the educational administrative domain. The first route was through the university governing bodies, which consisted mainly of businessmen and women who had seen the benefits of TQM in their own domain. Secondly, TQM quickly made inroads through the business and engineering departments of most academic institutions, often as part of the curriculum. Thirdly, Western universities were searching for some form of highly visible quality assurance mechanism, which would give external observers the impression the institution is of a quality nature. Finally, as universities became more competitive, TQM became important as a marketing

tool used to show outside observers that quality was of utmost importance to the institution in question. (Williams, 1993, p. 229)

Herman and Herman (1995) believe that to use total quality management in education, management and administration must include three elements, those of a quality philosophy, certain quality goals, and a feedback process. The philosophy is that products and services are ever improving. The goal is that these products and services are of the highest quality. Finally there must be a process by which feedback from all stakeholders is used to further improve quality. (Herman, & Herman, 1995, p. 14) In education, Weller and David (1996) maintain that total quality management is perceived by many members of management as a vehicle for change, requiring different attitudes and values that will increase the quality outcomes of these changes. (Weller, David, 1996, ¶ 10)

Motwani and Ashok (1997) state that there are four phases to implementing the total quality management system into any educational environment. The first step is to gain an acceptance and commitment towards implementing the system, by all the stakeholders. Secondly, an evaluation of present quality assurance methods must be made. Once this evaluation is completed, administration must determine if total quality management is appropriate given the institution's culture. If it is deemed appropriate then the third stage consists of integrating the institution's goals and objectives into the design of a new system, and the establishment and training of groups responsible for implementing quality management initiatives. Finally, all total quality management initiatives must be expanded and integrated into daily life at the institution in question. This is most commonly accomplished through the offering ongoing training, and the recognition and

rewarding of activities that promote total quality managements' principles. (Motwani, Ashok, 1997, ¶ 19)

There are many ways that total quality management can enhance the quality of distance academic institutions. The implementation of total quality organizational networks can lead to the better sharing of information, and the increase in communications can develop into mutual support mechanisms that will benefit the entire institution. (Berry, 1997, ¶ 80-85) Total quality management is also thought to be a content free management system that is applicable to any type of educational institution. (Berry, 1997, ¶ 85)

Total quality management has also given distance educational administrators methodologies to employ statistical tools, such as cause-and-effect diagrams, pareto charts, control charts, histograms, and scatter diagrams, that effectively measure quality. (Macchia, 1993, p. 48) Total quality management provides a system and a reason for constantly searching for improvement, and cultivates a culture of change and flexibility. It also reallocates decision making from a hierarchy management model, to one that accepts input from all players within the organization. Finally total quality management focuses the question of quality from measuring the quality of products, to evaluating the quality of performance. (Yudof, Busch-Vishnlac, 1996 p. 25)

The main difficulty with implementing total quality management systems in education is in defining systemic inputs and outputs. Yudof and Busch-Vishnlac (1996) describe this difficulty in detail. For example, one problem is in properly identifying the primary customers of the university. Are the students as the recipients of the educational product considered the primary customers, or are graduate schools and businesses the chief

customers? Yudof and Busch-Vishnlac (1996) believe that the difficulty with identifying proper inputs and outputs in education rests in that distance educational products are difficult to control, and are in effect, intangible products. (Yudof, Busch-Vishnlac, 1996 p. 24)

There are many more negative aspects in attempting to implement total quality management in any educational institution, as this technique can mean different things to different people. If used improperly, total quality management can easily overshadow processes that may not measure as high quality, but may be educational issues that are still worthwhile. (Ashcroft, Forman-Peck, 1996, ¶ 43) Finally, the transition of total quality management from theory to practice can be difficult as not all institutions have the resources or the will to implement it properly. (Yudof, Busch-Vishnlac, 1996 p. 26)

Closing Remarks Regarding these Managerial and Operational Issues of Quality

Arnold, Harman, and VanderBilt (1998) believe that a management that is open to change will usually implement any quality improvements quickly and effectively. However, it can be seen as a result of the discussions presented thus far, that quality is only achieved through collaborative efforts, and by way of a collective responsibility. We must therefore look beyond management and administration to other factors that impact the quality of distance educational offerings, matters such as pedagogical considerations, technical and student services, and the question of inclusion in the creating of a quality distance educational experience. We now turn our attention toward the literature concerning those aspects of ensuring quality in distance education.

CHAPTER 5: QUALITY OF DISTANCE EDUCATIONAL PEDAGOGY, SERVICES, AND ACCESSABILITY

The literature surrounding the managerial and operational aspects of quality in distance education was concerned with issues of quality that are not often visible to the average student. We now turn our attention to issues of quality that are often in full view of the learner. We begin by discussing the literature dealing with the issues of quality surrounding program and course design. From there we will move on to discussing the provisioning of quality technical, library, and student support services in distance environments. Finally, we will look at how the literature handles inclusion in distance academic settings, and how overall institutional quality is impacted through its treatment of issues of culture and special populations.

Pedagogical Considerations and Quality in Distance Education

The pedagogical considerations concerning the quality of distance education is centered around two principle areas, those concerning the quality of programs, and those concerning the quality of course offerings. Program design in distance learning involves the design and development of the qualification to be conferred, usually consisting of a number of courses, while course design mainly concerns itself with the design, development, production, and delivery of specified course materials. (Lee, 1996) We will first examine the literature that discusses quality in relation to program design in distance education, then move on to discuss quality as it relates to the designing of distance courses.

The Literature Surrounding Quality and Program Design in Distance Education

According to the literature, a quality distance educational program is one that is learner centered. (Broad, 1999, ¶ 10) This requires program developers to have a firm grip on the profiles of their possible clientele. It is Grill (1999) who suggests how to begin the identification process, through simply asking questions, such as who is the target audience? Grill (1999) has established, through the collection of data, a composite sketch of the average distance learner. A typical distance educational learner is an adult, between the ages 25-50, who often has experience with formal education, is often highly motivated, and voluntarily undertaking the distance learning program. (Grill, 1999, p 32) Broad (1999) adds to these factors by stating many distance learners are also working professionals who are interested in upgrading their work related skills, however their personal and/or professional commitments prevent their attending traditional classes. (Broad, 1999, ¶ 10)

Moller (1991) furthers the suggestion of profiling potential program participants by breaking the process into two stages. The first is an analysis of the general traits of potential learners, and the second is a determination of specific program entry competencies that the learner must possess to gain admission to the program, based on their general traits. In analyzing the learners, Moller's (1991) assumptions are similar to those of Grill (1999), with the added factor that he believes program planners must also determine if the learners are sufficiently accepting of the distance educational process. In determining specific program entry competencies, the program planner must gauge the average entry-level academic abilities, so that students who enter the program will be more likely to succeed. Areas that must be examined for competence include motivation,

learning style, reading comprehension level, prior knowledge of the topic, time commitments, and the education level of potential clients. (Moller, 1991, p. 55)

Once the learners have been identified and analyzed, program development can then proceed, based on the potential students' characteristics as a whole. Alexander (2001) believes that with these characteristics known, it is then appropriate for distance program designers to consider such issues as; where the most appropriate location for these learners to engage in the distance learning would be, what kinds of technologies would need to be available in these locations, and what types of learning supports would be required. (Alexander, 2001 p. 245) When program designers begin the program design process aware of such considerations, Alexander (2001) asserts that the overall quality of the general program will be of a higher level, ensuring a higher satisfaction rate.

Another major pedagogical factor distance educational program designers concerned with quality must be aware of is the trend towards the modularization of many distance program curriculums. (Bridges, 2000, p. 42) Part of the rationale for this trend is that it facilitates flexibility for students, allowing students to complete a program over a period of time that best suits their needs, and also allows them to complete certain program requirements through other institutions should they require this option. (Bridges, 2000, p. 42) In traditional post secondary educational programming development, quality modularization often focuses on the contact hours between the students and instructors, measuring this factor in what are known as "credit hours." However, in distance education, the type of contact between students and instructors differs, and program designers should account for this difference in a way that will allow the transferability of credits to and from the program in question. (Hickman, 1999, p. 17)

To ensure quality program development, distance institutions with open admissions policies may develop methods of assessment that identify potential student academic deficiencies and offer support to students' to overcome these deficiencies. (Lezberg, 1998 p. 30) In this way, a certain level of quality is maintained, not through the selection process, but rather through the offering of additional resources to the students. (Lezberg, 1998 p. 30) As well, many distance universities that have a policy of allowing credits to be awarded in a process known as a prior learning assessment recognition, or PLAR. The awarding of PLAR credits on admissions to a program has great implications for quality in that the credits awarded may take away from the overall expected outputs of the program in question. (Belanger & Mount, 1998, p.116) Should a distance institution accept credits based on PLAR's it makes it more difficult for program designers to create a program using introductory courses that can later be built upon, which could affect overall program quality. (Armstrong, 2000 p. 24)

From the overview of the literature presented, we can determine that quality of program design in distance education focuses on the evaluation of students as inputs, and the planning process surrounding the accommodation of those students in the proposed program. However, program design is only part of the equation of offering quality pedagogy in distance education. We will now turn our attention to the other half of that equation, that of the pedagogy of quality course design in distance education.

The Pedagogy of Quality Course Design in Distance Education

Freeman (1991) provides us with three approaches to quality, as it relates to the quality of course design in distance education. The first is what he terms, "the glossary approach" to quality, where course designers are concerned with impressing students

with “the look” of the materials. (Freeman, 1991, 25) Secondly, Freeman (1991) describes “the engineered approach,” in which quality is regarded as the process of how smooth the transitions between course topics are, and how well they relate to each other. Finally, Freeman (1991) uses the term “fitness for purpose.” A course is deemed to be fit for purpose if it is visually attractive, if it is possible to meet the learning objectives through undertaking the course, and if it will be favorably evaluated by a cost benefit analysis. (Freeman, 1991, 25)

Mann, (1998) takes a somewhat different approach to viewing quality regarding distance educational course pedagogy. He believes that a course’s level of quality is reflected by a number of factors including; the age of the learning materials, the amount of learner instructor interaction during the course, the existence of a transparent assessment and grievance procedure, the existence of distance based study groups, and the periodic reevaluation of course materials by external audit. (Mann, 1998) Spallek, Berthold, Shanley and Attstrom (2000) add to the knowledge surrounding this issue through their evaluation of students’ opinions on how quality of course design should be viewed in distance education. The results of their study demonstrate that students believe that courses that are regularly updated, easy to navigate, have defined educational objectives, and that stimulating learning, were of most importance when it came to well designed quality courses. (Spallek, Berthold, Shanley and Attstrom, 2000)

Typically, when distance institutions consider creating, or improving upon distance educational course offerings, the institution’s instructional design team would become involved. Murgatroyd, (1993) has determined that the quality of outcomes regarding instructional design team efforts in distance education often suffer from three main flaws.

The first has been that often instructional design teams overemphasize measurable outcomes, rather than the experience of learning. A second problem is that often instructional design teams overemphasize the instructional process, rather than the process of learning. Finally, often the learning needs analysis performed by the instructional design team is based on the students reaching set objectives, rather than learning as overall progression. (Murgatroyd, 1993, p. 35) Murgatroyd (1993) believes that these issues can be rectified through refocusing instructional design efforts, from the instruction, to the student.

Kaufman (1990) suggests that often the instructional design process in distance education is totally reactive in nature. He believes that to enhance course design quality, instructional designers can apply their skills toward the goal that failures can be avoided. This would extend the role of the instructional designer to encompass the domain of quality management, through a more proactive approach to offering quality courses. (Kaufman, 1990 p. 33) Heerema and Rogers (2001) demonstrate this approach by differentiating between courses that are response driven and design. To have a course that is response driven, meaning changes are made based on the response of students to the course in general, is a labor intensive endeavor in which quality ultimately suffers, as this process is limited by the funding available. If course is design driven, meaning that change is built into the parameters of the course, there are two significant quality benefits. “First, it can be tailored to individual students. Thus, as the number of students taking the course increases, the quality of education achieved can maintain its richness. Secondly, substantial cost savings may be achieved...” (Heerema, Rogers, 2001 p. 17) over a response driven model.

In distance educational course design, there exists a number of established methods that are intended to systemize the process of course rollout. A major system concerning the quality of course rollout in distance education is the system of quality functional deployment, or QFD. Quality functional development is a systematic approach to service design and the evaluation of a course that relies on a specific methodology for meeting the needs of students, in that these needs are the design basis of the course in question. (Murgatroyd, 1993, p. 34) According to Murgatroyd (1993) QFD is a useful tool in maintaining and improving quality in all aspects of design, development, and delivery of distance course materials. There are three ways that QFD enhances course quality in distance education. “First, it uses customer data to drive design and delivery decisions. Secondly, it requires a design and delivery team to measure the value adding properties of each component of the process. Finally, when combined with cost benefit data, QFD becomes a focal point for identifying support service improvements needed to enhance customer satisfaction, cost control, and performance.” (Murgatroyd, 1993, p. 45) In this process, course inputs are examined totally from the viewpoint of the customer, or rather, the student. Given this information, the idea is to force the design team to clearly specify benchmarks of student success. (Murgatroyd, 1993, p. 45-50)

Design issues are not the only issues that determine the overall quality of a distance educational course. To be truly considered a quality product, it must be said that any distance educational course must be one that conforms to the law. “In 1999, as a result of increased intellectual theft, The Digital Millennium Copyright Act was passed which contains substantial roadblocks for distance education, and educational institutions and faculty are now finding that their efforts to provide distance education courses are often

hampered by copyright.” (Gasaway, 1999 ¶ 2) According to Gasaway, (1999) this act does allow for exemptions for classroom usage of copyright materials, so long as the display process is face to face. In an attempt to allow the use of materials in distance educational settings, the Act includes exemptions for what is known as fair use. To determine if a use is “fair,” the materials must be used for instructional purposes, this purpose proven to a reasonable extent by the user, should the owner require. (Gasaway, 1999, ¶ 12)

To enhance quality in distance educational course pedagogy, the evaluation of the learner must be considered when designing distance educational courses. There are two major perspectives when considering distance learner assessment, that of instructor evaluation for credit, and that of student self-evaluation. (Mann, 1998 p. 12) Mann (1998) highlights how course quality can be enhanced when evaluating students through recounting his research at the University of Surrey. In a distance based masters level program at this institution, all assignments are double marked to create more of a face validity and equality of assessment. When the students are not happy with the grade, or believe that they have been unfairly judged, they have the possibility of requesting a third reading of the assignment, which is done by an invigilator not connected to the course. (Mann, 1998 p. 12)

Berry (1997) presents a much more systematic approach to the enhancement of quality of distance education student assessment in his presentation of what he terms, “the quality learning model.” In the quality learning model, students are encouraged to accept responsibility for the quality of their work, and evaluate it accordingly. Positive

evaluations are equated with the continuous improvement of learning outcomes, and the ability of students to take responsibility for this improvement. (Berry, 1997, ¶ 84)

Pappas, Lederman, and Broadbent (2001) examine a major factor in ensuring distance course quality in relation to evaluation, that of monitoring for student security and plagiarism. These researchers point out that the technology for developing security measures to ensure that the persons registered in the courses are also the ones supplying the work is especially deficient. They state that distance learning environments offer much more of a challenge in monitoring plagiarism as typical body language and social cues are non-existent in these circumstances. (Pappas, Lederman, & Broadbent, 2001, ¶ 3) These sentiments are furthered by Ben-Jacob (1998) who wonders aloud "...if it is really John Jones who is sitting in that student's seat, as in the traditional classroom or his best friend who may have already taken the course and is willing to sit through it again as an imposter for his friend." (Ben-Jacob, 1998, p. 212) This is a serious barrier to ensuring the quality and the integrity of the evaluation process in distance educational courses, one that requires further research.

Anderson, (2001) has added a new dimension to the discussions of distance educational pedagogical quality, in that he believes for a course to be truly quality in nature, it must encompass elements of the teaching of what is known as the hidden curriculum. (Anderson, 2001) There are three historical definitions to the term hidden curriculum. First, the hidden curriculum can be the indoctrination process that attempts to maintain the social privilege that comes with the knowledge of certain fields or occupations. Secondly, the hidden curriculum can refer to the subtle effects of the setting in which formal education occurs. Finally the hidden curriculum can refer to the

acquisition of the unstated rules required for a student to complete his or her studies. (Anderson, 2001 p. 30) It is imperative that those creating and implementing distance education courses be aware of these factors, and realizes that they are part of the overall educational experience. Anderson (2001) furthers these definitions and describes their role within the domain of distance education. As applied to distance education, the general hidden curriculum includes having the student learning to learn at a distance, learning to be an expert at not only the course materials, but the technology as well, and learning how to play the game behind the educational experience. (Anderson, 2001 p. 30)

The final issue we examine in relation to the quality of course pedagogy is that of evaluating the overall quality outcomes of the course in question. In distance education there are two trends in the evaluation of the overall quality outcomes of a course. The first places an emphasis on evaluating learning outcomes. These learning outcomes are often evaluated by tracking those who completed specific courses into their next endeavors, whether these endeavors include a return to school to take higher level courses, or an entry into the workforce. The second places an emphasis on student needs and the perception that the course met those needs during the learning process. (Broad, 1999, ¶ 22) These two methods of evaluating quality are often gauged through an end of course student evaluation questionnaire, or through follow-up questionnaires given to students after they have left the distance institution in question. (Kirkwood, 1998 p. 238)

Cresswell and Hobson, (1996) believe that the quality design of many end of course evaluation questionnaires is all too often taken for granted by those who construct the survey, and highlight a number of assumptions often made when employing such a questionnaire. The first is the assumption that the student is always unbiased and

objective in their evaluation of the course in question, which is not always the case. Secondly, often these surveys over assume the students' ability to properly evaluate the relevance of knowledge presented in the course. Finally, course evaluation questionnaires often consist of a standardized set of questions, used across the university, and do not ask questions that give constructive responses. Course quality surveys that do not consider these factors may not be collecting accurate information, which may lead to decreased quality of future courses. (Cresswell, Hobson, 1996 p. 140) Indeed, many course designers and academics are skeptical of the results obtained through end of course evaluations, and warn that these surveys can be used to disguise the quality of the courses presented in an attempt to inflate positive course statistics, for administrative and marketing reasons. (Carswell, Thomas, Petre, Price, Richards, 2000 p. 29)

Although much of the literature surrounding the quality of distance education focuses on the managerial and operational aspects of distance education, it is pedagogical quality that will ensure the students come away from the distance learning experience with a feeling of personal growth. It is apparent from the literature that a focus on pedagogical program and course quality requires the belief that the student is the center of the learning experience. We will now turn our attention to the quality provisioning of services to students.

Technical and Student Support Services and Quality Control in Distance Education

Technical and support services form a vital part of a distance institution's infrastructure in supporting student learning at a distance. The literature states that quality technical and student services are critical in assisting the students in meeting their educational goals. In this section we will first look at issues of quality in the offering of

technical support services in distance education, and then we will move on to a discussion of distance based student and library support services.

Quality and Technological Services

When one thinks of technological services integration in distance education, what frequently comes to mind is the use of computer technology for course delivery. However, just as important as any hardware, are the people who maintain it, and use it to deliver those services. Any discussion of providing quality technical support services must not only include the technologies themselves, but also the human resources support structure surrounding it. (Alexander, 2001 p. 246)

Connolly (1994) describes quality of technological services in distance education in terms of technical service security, and information protection. He believes that it is the responsibility of the distance learning institution to provide legally obtained hardware and software when the distance learning environment requires the use of those resources, or mandate that their ownership be a prerequisite to entering into the course. (Connolly, 1994 p. 39) Further, he asserts that the integrity and privacy of student information and files is one of the primary missions of those employed in the institution's technological services division. (Connolly, 1994 p. 40)

Alexander (2001) concentrates on the use of technological infrastructure for communications purposes in distance education, and believes that improving communications, by way of an institutions technology support services, will improve overall quality. He cites surveys in which students consistently show a strong desire for a high level of communications between faculty and other students, using new technologies. He believes that the use of these new technologies communications has a

major influence on student perceptions of a quality distance learning experience.

(Alexander, 2001 p. 242)

Hirschbuhl, Zachariah and Bishop (2002) believe that the emergence of knowledge management systems holds great promise in the improvement of the quality of distance education technological services. He states that “universities have been searching for a means to close the gap between the rate of change via technology and the rate of learning, in distance learning environments, and this gap closer will be Knowledge Management tools that deliver Distance Learning.” (Hirschbuhl, Zachariah, Bishop, 2002, p. 89)

Priteer (1997) echoes this sentiment in his belief that knowledge management systems will do much to not only make course information available at the convenience of students, but also produce systems that will become a service hub in the delivery of programs and more importantly an intelligent and customizable information source for students that will improve overall quality. (Priteer, 1997, p. 86)

An interesting example of how technical services may help to improve the quality of distance educational offerings comes to us by way of the American armed forces. Willingham (2000) describes this process, which is termed the Advanced Distributed Learning Project, or (ADL). What Willingham (2000) illustrates is a situation in the late 1990's in which the Pentagon had no means of standardizing or ensuring quality in the distance education it provided to its' soldiers. As a result, a web based design quality benchmarking tool named SCORM, or the Sharable Courseware Object Reference Mode was issued. Previous to SCORM, the Pentagon had been unable to evenly distribute computer based distance learning courses as many of the computer systems employed throughout the various departments were incompatible. SCORM has made it possible for

those digital platforms to communicate with each other, and thus improve overall quality. (Willingham, 2000, p. 74) The ADL project has improved distance educational quality in that it has established a guide to developing and distributing distance education over the computer, which is platform and programming language neutral, therefore increasing the accessibility, interoperability, reusability, and the affordability of the course in question. (Willingham, 2000, p. 76)

Priteer (1997) believes that focusing too much on quality of information resources and storage capability can lead to a decrease in the quality of overall learning within the academic environment in question. What Priteer (1997) finds worrisome is that a concentration by administration on the acquisition of technology, may lead to a neglect of the efficient usage of technology already in the universities' inventory. (Priteer, 1997, p. 83) Indeed, Anderson and Tushman, (1990) further this view with their discussion of the theory of dominant design, in technology evolution. They believe that systems preoccupied with dominant designs can adversely affect the progress of the use of current technology, and ultimately the expectations of quality. Dominant design standardizes the use of technological infrastructure in distance education which allows for the general acceptance, by both customer and staff, of a product that may not meet the student's needs. (Anderson & Tushman, 1990 p. 627) Once a technology has become standard, it is difficult if not impossible to displace. Those concerned with the quality of technological services in distance education must be cognizant of the idea that the emergence of a dominant technological infrastructure may not offer the best quality. (Anderson & Tushman, 1990 p. 627)

The issue of dominant design in the offering of technological services is furthered by Armstrong's (2000) discussion of sustaining and disruptive technologies. A sustaining technology is one which allows users to improve the quality of their individual outputs. A disruptive technology is one which leads to inferior outputs. (Armstrong, 2000 p. 22) Initially, this disruptive technology is insufficient. However, once the technology has become main stream, customers perceive the product to be quality in nature, as there exists no other similar product available with the certain standard features. (Armstrong, 2000 p. 22) Thus, actual quality may be thought of as a superior quality as the distance learning unit employs a mainstream disruptive technology. "The challenge to adult and distance educators is to be honest about what technology can promise in distance settings." (Grill, 1999, p 33)

A properly organized and efficient department of technical support services is required to ensure the effective offering of distance education programs. It is not only an indispensable service for students, but also necessary for members of the staff to effectively and efficiently fulfill their duties. We now turn our attention to an examination of the literature concerned with the quality of student and library support services.

Quality of Student Support Services

O'Donoghue, Singh, and Dorward (2001) express what student services have to deal with in what they term the new lifelong learning pattern. In the new lifelong learning pattern, education, training, work, and retirement blend into each other, and often involve numerous combinations of each. In other words, there may be individuals who are in semi-retirement, who are still working, and also undertaking a training program. Indeed

there may be those who are in retirement, also engaging in educational pursuits, purely out of self-interest. This presents an interesting situation for distance educational student services, in that quality often depends on having a clear portrait of the customer.

(O'Donoghue, Singh, & Dorward, 2001, p. 514) Olcott (1996) believes that new models of student services are needed in distance educational institutions, which are distinct from traditional on-campus services. He highlights the fact that distance institutions have attempted to address the issue of offering quality services to students with superficial alterations to the traditional mechanisms of student services. The fact of the matter is that institutional student services, even today, are designed primarily to serve 18 to 22 year old on campus students, which are not the realities facing today's distance learning universities. (Olcott, 1996, ¶ 22)

According to Murgatroyd (1993), establishing quality educational student services must focus on three objectives, improving the satisfaction level of the customer, offering efficient and effective student services, and finally decreasing the time and cost required to offer these services. (Murgatroyd, 1993, p. 45) Purnell, Cuskelly, and Danaher, (1996), through their examination of the literature, believe that distance education students need support services that contribute to maintaining or increasing student motivation, promote effective study skills, generate a feeling of "belonging" to the host institution, provide guidance through the study materials, provide access to resources, and finally provide answers to administrative queries. (Purnell, Cuskelly, & Danaher, 1996, ¶ 11) They believe that through addressing these areas, the overall quality of student services can be improved.

As critical to the quality of the educational experience as technical and student services are, is the offering of quality distance library services as well. Fulcher and Lock (1999) surveyed students as to what their concerns were regarding equity and quality of distance educational library services. The results of this research showed that the principal issue regarding library services is one of equity, in that distance library services must strive to be as comparable to more traditional library services as possible. (Fulcher, Lock, 1999 p. 320)

Quality of Library Support Services

There are two main types of distance learning library service models, that of the no contact hours model, where services are offered strictly at a distance, and that of the local group model, where local service centers provide in person services to students away from the host institution. There are also a number of hybrid models involving elements of each. (Fulcher, Lock, 1999) In surveying student opinion on which distance library service model would provide the best quality, Fulcher and Lock (1999) reported that most students believe a local group model employing resource centers is of a better quality, especially for students whose learning style requires personal contact with others. (Fulcher, Lock, 1999 p. 315)

Fulcher and Lock (1999) also illustrated a number of other general student beliefs regarding quality and library services. The students in their survey believed that collective loaning agreements with other universities would be very useful in ensuring access rights of students to library materials. A second imperative in improving the quality of distance library services would be the introduction of a web based information gateway, through which students would have remote access to literature searching

facilities. Finally, a document delivery service where students could access material by telephone, fax, or post, was stated as being of great value. (Fulcher, Lock, 1999 p. 325-326) However, it is not only the changing role of the library that will improve distance educational quality, in the view of Fulcher and Lock (1999), but the changing role of the librarian as well. They see the potential role of library staff in a distance educational environment evolving from that of a more traditional librarian, to that of an “information tutor.” It is this information tutor, working at a distance that will provide flexible, quality, and client oriented library service for distance learning students. (Fulcher, Lock, 1999 p. 326)

Lambert (1998) sums up what a quality distance educational institution should be striving for in the domain of technological, student and library support services. “Everything the school provides the student, from texts to motivation letters through collection communications to end of course diplomas, should reflect high quality, competence, taste and an obvious commitment to service.” (Lambert, 1998, ¶ 10) Broad (1999) emphasizes that students who take distance courses that are suppose to be available at any time or place expect the correlating services to be offered in the same way, and reflect the level of quality available to students who opt for on campus instruction. (Broad, 1999, ¶ 25) “Students will readily give up on a course if they cannot get the technology to work, and they do not receive student support.” (Alexander, 2001 p. 246) Thus, it is the quality of technological and student support services that are one of the critical linchpins of the distance learning experience.

Quality of Accessibility in Distance Education

Aside from pedagogy and support services, there are other, less visible factors that impact the overall quality of any distance learning institution. Students enrolled in distance education often include those from various cultural backgrounds, and students who could be considered special needs. This section will examine the literature surrounding the offering of a quality distance educational experience to students, regardless of cultural differences with the host institution, or their identification as members of a special population.

Cultural Considerations of Quality Distance Education

Distance education, using the definition presented in this writing, offers educational programming to groups that can be located a great distance from the providing institution. Often these students belong to different cultural and linguistic groups than the professors and support staff of the host institution. “Although difficult to define, the concept of a cultural group can be perceived as being closely associated with the notion of shared attitudes, behaviors, values and assumptions.” (Berry, 1997, ¶ 34) These differences in culture can present interesting educational challenges in offering students a quality distance educational experience.

With the global reach of distance offerings education, the central factor of cultural quality that must be considered is that of the use of language. Even though programs may be offered in a standard language, such as English, the English spoken at the host institution may be very different at the student’s location. (Van den Branden, Lambert, 1999 p. 257) The use of multimedia technologies in the offering of the distance educational can add to the enhancement of quality through the use of both verbal and

non-verbal communications. Quality of communications whether verbal, text, or media based must be well measured in the domain of distance education, to ensure quality. (Van den Branden, Lambert, 1999 p. 257)

The Disabled and Quality Distance Education

There has been much research concerning the integration and education of special populations using distance methods in the past few years. Hegarty, Bostock, and Collins (2000) provide us with four basic types of special needs that educators in any situation, and of any age group may encounter. They are those who are identified as having general cognitive difficulties, emotional difficulties, physical disabilities, and sensory disabilities. (Hegarty, Bostock, Collins, 2000, p. 200) Attention to detail and awareness of these issues concerning special populations' needs to be realized to truly bring a quality distance educational experience to these special populations.

To ensure a quality distance educational experience for these special populations Paist (1997) provides a number of accommodations that can be offered, namely, instructional accommodation, course materials accommodation, and test accommodation.

Instructional accommodation involves situation specific planning that involves direct input from the student and the instructor. Course materials accommodation includes the offerings of alternative means of information transition, including voice synthesizer and brail. Finally, testing accommodations must be included, most often this consists of the allowance of extra time, and multiple testing formats that will allow instructors an accurate tool for assessment, given the specific situation. (Paist, 1997, p. 13-14) The strengths of distance education and its inherent use of technology means that this method

of education has much to offer to the quality of the learning experiences of special populations.

Conclusion

What has been examined here is the literature concerning the quality of pedagogy, the offering of services, and of inclusion in distance education. It is in these areas, where quality is most visible to students and the general public, and where their impressions regarding quality are be made. We now move on to the discussions section, where we will overview comments made in the literature concerning the state of quality in distance education. From there, we will make recommendations for future research into this field.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

The previous five chapters have outlined and reviewed the general trends in the published literature concerning the quality of the structural arrangements and practices of Western distance educational institutions today. In this final chapter, we will discuss the writings of those who comment both positively and negatively on the literature, and present the general findings of this research project, contemplating possibilities for future research. We will begin with a discussion of those writings that support or criticize the current directions of distance educational quality the literature.

Reactions in the Literature, to the Literature, Those Supporting Current Directions

Those who support current writings on quality initiatives in distance education, do so by centering around two general themes. The first theme generally describes how distance educational institutions have refined quality in such a way that, not only is distance education a viable option for those who wish to undertake post secondary studies, it can also offer quality advantages over traditional academic institutions. The second theme focuses on the impact that distance educational quality initiatives are now having on more traditional post secondary institutions. We begin by looking at the authors that claim distance education now has numerous quality advantages over more traditional forms of education.

There are a number of authors who look at the literature and highlight the potential quality advantages that distance educational institutions can offer over more traditional institutions. While always contingent upon the specific design features of the distance educational course and program, Milheim, (2001) highlights several specific quality advantages for students who opt for distance offerings over a traditional education.

These advantages can include factors such as "...instructional convenience (24-hour access, no required traveling to class, no scheduling conflicts, etc), increased exposure to technology-based applications (email, listservs, etc), as well as the potential for an improved education through a higher degree of independent learning, and an increased amount of information resources." (Milheim, 2001, p. 537) The benefits that Milheim (2001) describes are what Trantin (2000) calls expected benefits. However, Trantin (2000) also believes that there are other less visible quality benefits that can be attributed to distance education, which he calls unforeseen benefits. Unforeseen benefits can include such factors as "...work satisfaction, improved company image, better service, and less conflict inside the organization." (Trantin, 2000, p. 25) Fulchler and Lock (1999) deal with distance learning in the professional fields of teaching and nursing, where there is an opportunity to apply what is learned immediately in the students' workplace. (Fulcher, Lock, 1999 p. 320) It is benefits such as these that Trantin (2000) calls intangible benefits, benefits that can be applied immediately by the student. (Trantin, 2000, p. 25) It is these expected, unforeseen, and intangible benefits that give distance education, what many authors believe, a quality advantage over a more traditional education.

There are some authors that believe advances in the quality of distance education have uncovered benefits that are transferable to a more traditional academic setting. Guri-Rozenblit, (1990), deduces that there are a number of strategies currently employed in many distance teaching universities that could improve the quality of learning, teaching, and the resource provisioning, of traditional universities. First, he believes that distance education can help to improve the quality of university level textbooks by using distance

educational based instructional design quality control procedures in the evaluation of the self-study materials. (Guri-Rozenblit, 1990, p. 74) He also believes that the methods of cultivating external relations, used by distance institutions, can promote collaboration between traditional universities at the administrative level, in the hopes of better coordinating such services as prior learning assessments, and the transfer of credits. As well, he sees advances in distance learning as being applicable to the improvement of the quality of pedagogy in university teaching, through the continual examination and redefining of what quality means in higher education. Finally, he believes the field of distance educational research promotes studies into the quality of overall adult learning, through the submission of scholarly articles to the many distance learning journals. (Guri-Rozenblit, 1990, p. 74 -78) We will now turn our attention to the literature regarding challenges to current research directions, concerning quality in distance education.

Reactions in the Literature, to the Literature, the Challengers to Current Directions

It must first be said that there are no major challengers to the infusion of quality into distance education, but rather there are challenges to some of the current directions distance educational quality research is taking. Most of the authors quoted throughout this work, cite the benefits of quality strategies, whether these strategies are pedagogical, administrative, or service oriented in nature. However, there are those who find that the overall general direction of a number of the quality strategies are inadequate, and contest their use in a distance educational setting. Tait (1993) highlights the three main areas that are of major contention and debate surrounding the literature concerning quality in distance education. They are, the quality of the final product and the standard to which it should be delivered, suggestions for a flatter hierarchy contrasting against higher status

and salaries for the educational leaders, and finally a debate surrounding the jargon used to describe distance educational quality. (Tait, 1993, p. 308)

The majority of those who present challenges to many of the strategies and structural arrangements that are said to enhance quality in distance education, concentrate on the author's definition of quality. Often the main argument concerning quality initiatives in distance education is at variance with the perceptions of what quality can, and does mean. Ashcroft, Forman-Peck, (1996) believe that this stems from the reality that the term quality is an ideologically loaded term. They assert that because quality can refer to the purposes, processes, and the standards of education, the term itself depends on the viewpoints of different people, which is heavily influenced by their own personal backgrounds, and their goals and objectives concerning quality. (Ashcroft, Forman-Peck, 1996, ¶ 17)

Also a central issue of contention with those critical of a number of current distance educational quality strategies is the defining of the terms customer and student satisfaction. Many scholars believe that students are not the only consumers of quality in post-secondary distance education. It is Ewell (1993) who best highlights this in that he sees the current literature as being too narrowly focused on the student, as the only customer of distance learning. He believes that the term customer can be applied to any group that derives benefit from the distance educational output of the institution in question. Ewell (1993) views the term customer in terms of social accountability, in that the term customer must not only be focused on the students, but to faculty, employers, and society in general. (Ewell, 1993 p. 55)

Neumann, (1993) gives an overall description that captures the general misgivings in the literature concerning student satisfaction, by categorizing it in terms of treating the students as the “proverbial black box.” The inputs into this black box are college-based accumulations, such as courses, program requirements, and services, and the outputs are academic achievement, and success in ones chosen field. The general view is that students enter the institution, are given quality inputs, and as a result, quality outputs are assured, and satisfaction assumed. It is this view of quality, strictly in terms of outputs that is most prominent in the distance educational literature today, and the one with the most opponents. (Neumann, 1993) Roffe (1998) among others believes that to compare higher education in terms of inputs and outputs similar to an industrial business is not a practical usage of the term quality. “Even though an organization can, in theory, be broken down and represented by a simple structure, in practice it is infinitely complex. For a higher educational institution with a social mission, the process of small incremental improvement has to be maintained across a complex range of performance indicators.” (Roffe, 1998, ¶ 23) It is these complexities that are not yet modeled in any usable and universal form that is presently of value to those who wish to improve quality in their distance learning institution.

Perhaps the most criticized aspect of implementing quality in distance education centers around the area of management and administration, more specifically, the application and utilization of Total Quality Management principles in distance institutions. Ewell (1993) believes that TQM is often used inappropriately. One reason for this is that administration often confuses Total Quality with the traditional practice of linear goal-setting and strategic planning. (Ewell, 1993 p. 55) A second reason TQM

often fails is the insistence of TQM to decentralize and create more of a matrix type of environment at the institution in question. A final difficulty can be seen as a use of total quality management to create quality targets, using techniques such as benchmarks, to reach objectives that are inherently too strict for any academic setting. (Ewell, 1993 p. 55)

Roffe (1998) also examines the theoretical problems of applying continuous quality improvement in higher education, by looking at its general usage in industry. He believes that a focus on the existing systems of enhancing quality in education, will lead to less variety and flexibility when initiating new and innovative means and methods of ensuring quality. (Roffe, 1998, ¶ 1) Brown (1999) furthers this point in that he asserts that the rules of quality management systems do not allow for diversity in distance educational institutions. (Brown, 1999, 5) Ewell (1993) is more harsh in his criticisms and further states that TQM aims to reduce variation. (Ewell, 1993 p. 54) Variation which Roffe (1998) believes is necessary for the viability and evolution of the institution.

There are a number of scholars who warn administrators not to become too enamoured with quality management fads, such as total quality management. To highlight this, Birnbaum (2000) considers management “fads” and their eventual diffusion from business and government into higher education. After reviewing the literature, Birnbaum (2000) found a consistent and predictable cycle, which describes the trajectory of management fads. These stages follow the fad from its creation, and evolution, through to its eventual demise. Birnbaum (2000) warns educational administrators to take great care when attempting to implement new and exciting quality management techniques as

they can be very costly endeavors that may not offer what was originally promised.

(Birnbaum, 2000, p. 4-8)

Although all of the quality considerations, models, and strategies presented throughout this work, contribute much to the conversation of quality in distance education, critics agree that most techniques and applications are not truly universal. It is as though many of these critics desire a one size fits all approach, while at the same time highlighting that such an approach is inherently flawed in that it would stifle academic variety. We now turn our attention to concluding this work, and suggesting directions for future research in quality of distance education.

General Conclusions Suggestions for Future Research

The purpose of this study was to synthesize a delimited number of sources in the existing published literature that primarily and explicitly discuss the dominant approaches to ensuring quality in distance education. More specifically, this synthesis attempted to identify the current means and methods of ensuring the quality of the structural arrangements and practices in the devising, managing, delivering, and support of distance offerings in post secondary distance learning institutions today. As a result of this synthesis, definite avenues for future research in this educational domain have been established. We will now explore some of those avenues, through a general accounting of observations made through the course of this research.

The vast majority of the research encountered regarding the quality of the structural arrangements and practices in distance education rests in three principal areas. The first area consists of writings that define and debate the terms “quality,” and “distance education.” The second area with the majority of writings is the area concerned with

quality issues of the management and administration of distance educational institutions. Finally, there appears to be a large quantity of literature concerning the quality of course pedagogy.

Conversely, there are three areas that are lacking in the distance educational quality literature. The first of these areas is a lack of research regarding the quality of distance academic program design. Secondly, there is a lack of depth concerning the offering of quality technical, library and support services in distance education. Finally, there is a complete lack of literature concerning the offering of a quality distance educational experience to those of other cultures and of special populations. We will now explore these strengths and weaknesses in greater detail.

General Weaknesses in the Current Literature

There are general overall weaknesses in current research, which manifest themselves most prominently in the lack of quantitative studies that evaluating the use of quality strategies in distance learning institutions. As well, most of the literature presented makes great use of the scaffolding and theories offered by the quality research performed in the field of traditional education, and it attempts to draw parallels with established quality control measures in that domain. What is needed are a number of definitive quantitative studies that will lay the groundwork for establishing which practices enhance the quality of distance learning institutions. Most of the quantitative studies presented in this work were of a small scale, normally limited to one class, program, or institution, then the author made inferences of limited validity concerning their applicability to other learning institutions. The lack of quantitative research prevents the use of a meta-analysis type studies to statistically gauge the direction of the literature as a whole.

Future Research into Managerial and Operational Aspects of Quality in Distance Education

There is a large quantity of research within the literature concerning the managerial and operational aspects of quality in distance education. However, the majority of this research tends to focus on the use of quality management systems to infuse quality into distance educational offerings. There is also a major distinction between the earlier research in this field, and more recent works. It appears that in earlier research, the majority of which highlighted the positive aspects of implementing quality management systems in distance education, has been overshadowed by more current research showing that a blanket systems approach toward quality implementation will not always present the best possible quality outcome. Currently, the belief is that quality outcomes vary according to the individual intrinsic characteristics of each institution, and the quality goals and objectives of that institution. Building on current themes, there is a general need for research into the design of quality management systems that is infinitely flexible, expandable, or contractible to the point that if employed, regardless of the users knowledge of quality functions, the quality of any distance institution or component of that institution, would improve, without stifling the individualism of that organization.

Within the area of the management and operations of distance learning institutions, many authors agree that there is much potential for those willing to conduct research in integrating quality through the use of quality facilitators and quality teams. As shown in this work, information surrounding the implementation of quality facilitators, steering committees, management teams, and control circles is quite limited. Most researchers advocating their use present individual exemplars that were successfully employed in

their specific distance learning situation. Further research is required that would evaluate their effectiveness in other distance learning institutions, validating these techniques as truly enhancing quality. It may also be useful to conduct research on the use of quality facilitators and teams that would document the possible effectiveness of these strategies, when used in conjunction with each other.

The research on the methods of accounting and the marketing of quality in distance learning institutions was a predominant theme throughout the management literature. However, it is interesting to note that in all of the management and operational research regarding quality in distance education, there were no case studies or accounts of the successful implementation of these strategies in a specific distance learning institution. Rather, the research focused on the potential that these techniques may possess. Future research that provides examples of the marketing of quality in distance education, and the accounting of quality through the use of cost analysis, returns on quality, and value chain analyses, would be very useful for managers who would like to initiate these practices in their own institutions. The initiating of case studies or best practice studies into quality accounting procedures may yield in practice exemplars useful to the distance educational management community as a whole.

Literature Concerning Course and Program Pedagogy

There was a distinct difference between the literature encountered dealing with quality concerns of course pedagogy, and the literature concerning program pedagogy. There is much qualitative and quantitative research surrounding the quality of course design. The majority of research concerning quality of course pedagogy builds on previous research, not only from the domain of distance education, but of traditional educational methods as

well. Yet, in the area of distance educational program designing for quality, the literature appears quite limited. This is a serious problem for those who wish to draw on the literature when building any distance educational program, and forces one to rely more heavily on the quality literature surrounding more traditional educational circumstances. As an interesting side note, there was often a general substitution of the literature surrounding course design as replacing the need for literature concerning program design, in the belief that good courses on their own will yield a good program, which may or may not be the case.

Research Comparing Traditional and Distance Educational Quality

Throughout the research, there are a number of studies that compare and contrast traditional and distance education, however, there were none encountered that do the same specifically regarding the quality of distance education and the quality of traditional education. Although it is generally accepted that accreditation, academic assessment, and academic audit, are quality assurance mechanisms that are cross functional, if allowances are made for differences in their use in both domains, this is where the comparative research between the two ends. A general accounting of quality similarities and differences between these two methods of offering education would be useful, especially as there tends to be much crossover in quality terminology and methods from a traditional, to the distance educational domain.

Enhancing Quality Through Better Communications

A remerging but understated theme through the literature is the link between the level of quality and the level of communications in the distance learning institution in question. Whether that communication is required for management, pedagogical, service, or

cultural reasons, it seems as though any quality initiatives begin with the goal of better communications in mind. Communications was never really referred to as such, but rather it was implied in terms of team building, and increasing the number and quality of avenues for information sharing. More research is needed that highlight the connections between better quality, and communications structures that allow the sharing of information at all levels in distance learning institutions. Perhaps this could best be accomplished through cross curricular research between the domains of communications and distance education. Potentially this type of collaboration could take distance educational quality research into a new direction.

Future Directions in Distance Educational Quality Terminology

As stated throughout this synthesis there are many disagreements concerning the definition and usage of terminology describing quality in distance education. Many researchers invent new terms to describe their research possibly in the hopes that their coined phrases will become standardized. As well, it is not uncommon for the literature to borrow definitions and meanings from quality control methods, based in business or traditional education, and attempt to build on them in a distance educational setting. This borrowing only adds to the confusion when discussing issues of quality in distance offerings. What is needed is more research, and more importantly, widespread agreement in the defining of terms used to describe quality in distance education.

Future Research into Issues of Providing Quality to Different Cultures and the Disabled

The published literature concerning quality of distance educational offerings has almost universally ignored matters of offering quality services to those of differing cultures, and those who are of special needs. Regarding cultural differences, the research

was limited to matters concerning language barriers, and none of the research involved examining individuals who were actually members of a differing culture, or situations where the problems presented were overcome through quality enhancement. With regard to offering a quality distance educational experience to the disabled, there is little information, but what is available, identifies the potential problems, and suggests solutions that can be used in professional practice. This remains a solid base of knowledge, ready to be built upon in the provisioning of a quality learning experience to the disabled. Further research into cultural diversity in distance education, and enhancing the quality offered to the disabled is required to ensure equitable and universal access to all.

Future Research into Issues of Providing Quality of Technical, Library and Student Services

Research concerning the provisioning of quality technical and support services at distance educational institutions was limited to the publication of a number of “snapshots” of what a number of institutions currently offer. In the case of student support, scholars also borrow many techniques of quality enhancement taken from the services sector, but make a strict distinction between the two, in that distance educational technical and support services are more concerned with the actual well being of learners and instilling a feeling of belonging in the students.

Most sources highlighting the offering of technical and library services indicate that more research is needed, and most also indicate that the rapid development of technologies ensure that much of the new research concerning student, library, and technical services will almost immediately be outdated. To ensure currency and viability

of future research, new research would greatly benefit if it were of a collaborative nature, as current library, and technical services incorporate elements of not only distance education, but library information systems and computer science. Future research in this area would best benefit through better collaboration between these disciplines. However, it must also be noted that many of the authors look to the future, in the hopes that what will come with regards to technological advances, will enhance the quality of this domain.

Where Will the Literature be in the Future, and in What Form?

Perhaps the most interesting finding made by this researcher during the course of these studies, is the definite lack of literature being published in the traditional repositories of knowledge, those of peer reviewed journals and commercially published books. As a casual side observation, the literature encountered during the research phase of this work, commonly known as grey literature, was immense, changing on an almost daily basis. Online publications by academic groups, and organizations of professional practice seem to provide much more up-to-date and relevant information regarding the assurance of quality control in distance educational professional practice. It is quite likely that new and exciting strategies of quality control in distance education can be found within this area, and it would be beneficial to extend the type of synthesis in this thesis to include “grey” literature and non permanent works. This type of research however may not be reliable or valid, and may only provide a snapshot of quality efforts as it were, in the time period examined. The inherent problem with these works is that they are often non-permanent. This type of synthesis into non-permanent works could be extended to mailing lists and list services, in that this type of study could be conducted by collecting

information regarding quality in distance education, during a certain timeframe. It would also be interesting to gauge to what extent this grey literature is relied upon by professionals of practice, rather than their utilization of books or journals, to find the most current information.

Conclusion

Given the saturation coverage the topic distance educational quality related definitions has received, I must agree with Tovey (1992) in that "...it is perhaps appropriate to regard this initial phase as drawing to a close, to be overlapped and eventually replaced by a second phase, which addresses just what the concept of quality can mean in particular contexts, on what basis it should be established, and how this relates to what exists in the ongoing situation." (Tovey, 1992, p. 125) Therefore, a refocusing of the current distance educational quality research, from concerns with terminology, to how to best implement quality in professional practice is what is truly needed.

The state of published scholarly research regarding quality in distance education is characterized by a significant emphasis on management quality, and course design for quality. The equally important topics of quality of program design, quality technical and student support services, and the offering of a quality educational experience to diverse learners are not yet adequately developed. It is hoped that what was presented here will give those concerned with quality in distance education a fresh and more focused strategy of how to define and distribute a good quality distance learning experience, and that it has successfully identified many of the areas requiring future research.

References

- Abbot, J. (1995). Managing at the speed of light: Principals lead TQM teams. *T.H.E. Journal*, 23 (4), 74-77.
- Abernathy, D. (2001). Accreditation: Who needs it? *Training and Development*, 55, (1). 20-21.
- Alberani V, Pietrangeli P, Mazza A. (1990). The use of grey literature in health sciences: a preliminary survey. *Bulletin of the Medical Library Association*, 78 (4), 358-363.
- Alexander, S. (2001). E-learning developments and experiences. *Education + Training*, 43, 240-248.
- Anderson, P., Tushman, M. L., (1990). Technological discontinuities and dominant designs: A cyclical model of technological change. *Administrative Science Quarterly*, 35, 604-634.
- Anderson, T. (2001). The hidden curriculum in distance education. *Change*, 33 (6), 28-36.
- Anderson, L. (1998). Quality managers- how shall we educate them? *Innovations in Education + Training International*, 35, 89-98.
- Armstrong, L. (2000). Distance learning: An academic leader's perspective on a disruptive product. *Change*, 32 (6), 20-28.
- Arnold, J., Harman, J., Vanderbilt, D. (1998). Quality as stealth. *Planning for Higher Education*, 27, 28-39.
- Ashcroft, K., Forman-Peck, L. (1996). Quality standards and the reflective tutor. *Quality Assurance in Education*, 4 (4), 17-25.

- Auger, Charles P. 1989. *Information Sources in Grey Literature*. 2d.ed. London: Bowker-Saur.
- Barker, B. O., Frisbie, A. G., & Patrick, K. R. (1989). "Broadening the definition of distance education in light of the new telecommunications technologies." *The American Journal of Distance Education*, 3 (1), 20-29.
- Belanger, C., Mount, J. (1998). Prior Learning Assessment and Recognition (PLAR) in Canadian Universities. *The Canadian Journal of Higher Education*, 28 (2), 99-119.
- Belcher, M., Place, Emma. (2000). Quality assurance in subject gateways: creating high quality portals on the internet. *Quality Assurance in Education*, 8 (1), 38-48.
- Ben-Jacob, M. (1998). Distance learning: an international perspective. *Journal of Educational Technology Systems*, 26, 209-213.
- Bensimon, M. (1995). Total quality management in the academy: A rebellious reading. *Harvard Educational Review*, 65, 593-612.
- Benton, D. (1993). TQM and strategic planning. *Open Praxis*, 2, 25-26.
- Berge, Z. L., & Mrozowski, S. (2001). Review of research in distance education, 1990 to 1999. *The American Journal of Distance Education*, 15(3).
- Berry, G. (1997). Leadership and the development of quality culture in schools. *The International Journal of Educational Management*, 11 (2), 52.
- Birnbaum, R. (2000). The life cycle of academic management fads. *The Journal of Higher Education*, 71, 1-16.
- Bond, S., Finney, P. (2000). Certifying teachers as distance learning specialists. *T.H.E. Journal*, 27 (9), 22-30.

- Boshier, R., Mun, O. C. (2000). Discursive Constructions of Web Learning and Education. [Electronic version]. *Journal of Distance Education/ Revue de l'enseignement à distance*, 15 (2), Retrieved February 7, 2002 from <http://cade.icaap.org/>
- Branson, R., Buckner, T. (1995). Quality applications to the classroom of tomorrow. *Educational Technology*, 35 (3), 48-54.
- Bridges, D. (2000). Back to the future: The higher education curriculum in the 21st century. *Cambridge Journal of Education*, 30, 37-55.
- Broad, M. (1999). The dynamics of quality assurance in online distance education. *Electronic Journal of Instructional Science and Technology*, 3 (1). Retrieved March 3, 2002. <http://www.usq.edu.au/electpub/e-jist/docs/old/vol3no1/article1/v3n1a1.pdf>
- Brown, R. (1999). Diversity in higher education; has it been and gone? *Higher Education Review*, 31, (3) 2-16.
- Carnevale, D. (2000). Assessing the quality of online courses remains a challenge, educators agree. *The Chronicle of Higher Education*, 46 (24), 59.
- Carswell, L., Thomas, P., Petre, M., Price, B., Richards, M. (2000). Distance education via the Internet: the student experience. *British Journal of Educational Technology*, 31, 29-46.
- Carter, A. (1996). Essential questions on interactive distance education: an administrators guide. *International Journal of Instructional Media*, 23 (3), 123-129.
- Charp, S. (1998). Distance learning. *T.H.E. Journal*, 26 (4), 4.
- Charp, S. (2000). Distance education. *T.H.E. Journal*, 27 (9), 10-12.

- Cleary, T. (2001). Indicators of quality: One study determined quality by surveying the perceptions of campus stakeholders. *Planning for Higher Education*, 29, 19-28.
- Coffey, J. (1992). Contracting or Quality in Learning. *Education + Training*, 34, 20.
- Coffey, J. (1998). Distance learning - efficient and effective but no panacea. *Education + Training*, 40, 244-246.
- Colling, C., Harvey, L. (1995). Quality control, assurance and assessment - the link to continuous improvement. *Quality Assurance in Education*, 3 (4), 30-34.
- Connolly, F. (1994). Who are the electronic learners? *Change*, 26 (2), 39-41.
- Cresswell, R., Hobson, P. (1996). Facilities and assumptions in the use of student evaluation of distance education teaching materials. *Distance Education*, 17, 132-144.
- Dill, D., Massy, W., Williams, P., & Cook, C. (1996). "Accreditation and academic quality assurance : can we get there from here?" *Change*, 28(5), 16-25
- Donald, J., Denison, D. (2001). Quality assessment of University students: Student perceptions of quality criteria. *The Journal of Higher Education*, 72, 478-502.
- Evans, G. (2000). Quality assessment and management of universities: ways and means. *Higher Education Review*, 32, (2) 2-17.
- Ewell, P. (1993). Total quality & academic practice: The idea we've been waiting for? *Change*, 25 (3), 49-56.
- Finnegan, G. (1999). New frontiers in Grey literature. *College & Research Library News*, 60, 909-910.

- Fiorenzo F., Terzago, M. (1998). An application of quality function deployment to industrial training courses. *International Journal of Quality & Reliability Management*, 15, 753-768.
- Franklin, W. (1993). Multicultural education and the challenges of total quality management core skills. *Journal of Further and Higher Education*, 17 (2), 40-44.
- Freeman, R. (1991). Quality assurance in learning materials production. *Open Learning*, 6 (2), 25-31.
- Fresen, J., (2002). Quality in web supported learning. *Educational Technology*, 42 (1), 28-31.
- Fulcher, G. and Lock, D. (1999). Distance education: The future of library and information services requirements. *Distance Education*, 20(2), 313-329.
- Galbraith, M. W. (1997). The making of a skillful administrator. *Adult Learning*, 9 (2), 22-25.
- Garrison, D. R. (1989). *Understanding distance education : A framework for the future*. New York: Routledge.
- Garrison, D. (1993). Developing Open Learning Courses. [Electronic version]. *Journal of Distance Education/Revue de l'enseignement à distance*, 8 (2), Retrieved February 7, 2002 from <http://cade.icaap.org/>
- Gasaway, L. (1999). Distance learning and copyright: Is there a solution in site? [Electronic version]. *CAUSE/EFFECT*, 22 (3). Retrieved June 5, 2002, from <http://www.educause.edu/>

- Gilroy, P., Long, P., Rangecroft, M., Tricker, T. (2001). Evaluation and the invisible student: theories, practice and problems in evaluating distance education provision. *Quality Assurance in Education*, 9 (1), 14-22.
- Ginsburg, L. (1999). Educational technology: Searching for the value added. *Adult learning*, 10 (4), 12-14.
- Goodman, P., Salmon, G., Spector, J., Steeples, C., Tickner, S. (2001). Competencies for online teaching: a special report. *Educational Technology Research and Development*, 49, 65-72.
- Granger, D. (1990). Open Universities: Closing the distances to learning. *Change*, 22 (4), 44-50.
- Graves, W. (1997). "FREE TRADE" in higher education: The Meta University. *Journal of Asynchronous Learning Networks*, 1, (1) Retrieved March, 2002.
<http://www.aln.org/alnweb/journal/jaln.htm>
- Grill, J. (1999). Access to learning: Rethinking the promise of distance education. *Adult Learning*, 10 (4), 32-33.
- Gulcher, G., Lock, D. (1999). Distance education: The future of library and information services requirements. *Distance Education*, 20, 313.
- Guri-Rozenblit, S. (1990). The Potential contributions of distance teaching universities to improving the learning/teaching practices in conventional universities. *Higher Education*, 19, 73-80.
- Hall, J. (1990). Distance Education: Reaching Out to Millions. *Change*, 22 (4), 48.

- Hamilton, G., Davis, J., Kastigar, G. (1999). Interactive Multimedia Instruction and Quality Assurance. *Journal of Interactive Instructional Development*, 11 (4), 8-13.
- Hanson, D. Maushak, N., Schlosser, C., Anderson, M., Sorensen, C., Somonson, M. (1997). *Distance Education: Review of the Literature* (2nd ed.). Washington: Association for Educational Communications and Technology.
- Harvey, L. (1998). An assessment of past and current approaches to quality in higher education. *Australian Journal of Education*, 42, 237-255.
- Heerema, D., Rogers, R. (2001). Avoiding the quality/quantity trade-off in distance education. *T.H.E. Journal*, 29 (5), 14-21.
- Henderikx, P. (1992). Management and promotion of quality in distance education. *Open Learning*, 7 (3), 35-41.
- Hegarty, J., Bostock, S., Collins, D. (2000). Staff development in information technology for special needs: a new, distance-learning course at Keele University. *British Journal of Educational Technology*, 31, 199-212.
- Herman, J., Herman, J. (1995). Total quality management for education. *Educational Technology*, 35 (3), 14-18.
- Hickman, C. J. (1999). Public policy implications associated with technology assisted distance learning. *Adult Learning*, 10 (3), 17-20.
- Hirschbuhl, J., Zachariah, S., Bishop, D. (2002) Using knowledge management to deliver distance learning. *British Journal of Educational Technology*, 33, 89-93.
- Ho, S., Wearn, K. (1996). A TQM for enabling student learning. *Innovations in Education + Training International*, 33, 178-184.

- Hodgkinson, M. (1991). Industry, education, quality and teacher performance: a review of issues. *Journal of Further and Higher Education*, 15 (3), 36-46.
- Holmberg, B. (1977): *Distance education: A survey and bibliography*. Kogan Page, London.
- Jeengut, I. (1998). Quality assurance in distance education through tutor training at the Mauritius College of the Air. *Open Praxis*, 2, 20-23.
- Johnstone, S. (1996). Balancing quality and access: Some principles of good practice for the virtual university. *Change*, 28 (2), 38-41.
- Juran, J., & Gryna, F. (1993), *Quality planning and analysis*, McGraw-Hill, New York.
- Karapetrovic, S., Willborn, W. (1998). The system's view for clarification of quality vocabulary. *International Journal of Quality & Reliability Management*, 15, 99-120.
- Karapetrovic, S., Willborn, S. (1999). Holonic model for a quality system in academia. *International Journal of Quality & Reliability Management*, 16, 457-485.
- Kaufman, R. (1990). Means and ends. *Educational Technology*, 30 (6), 33.
- Kaufman, R. (1996). Visions, strategic planning, and quality-more than hype. *Educational Technology*, 36 (5), 60-66.
- Keast, D. (1997). Toward an effective model for implementing distance education programs. *The American Journal of Distance Education*, 11 (2), 39-55.
- Keegan, D. (Eds.). (1993). *Theoretical Principals of Distance Education*. New York: Routledge.

- Kennedy, M., Kettle, B. (1995). Using a transactional model in evaluating distance education programs. *Canadian Journal of Educational Communications*, 24 (2) 159-170.
- Kirkwood, A. (1998). New media mania: Can information and communication technologies enhance the quality of open and distance learning? *Distance Education*, 19 (2), 228.
- Krauth, B., Johnstone, S. (1996). Balancing quality and access: Some principles of good practice for the virtual university. *Change*, 28 (2), 38.
- Lam, K., Zhao, X. (1998). An application of quality function deployment to improve the quality of teaching. *International Journal of Quality & Reliability Management*, 15 389-413.
- Lam, Y. (1994) University program assessments: Effects of graduates' personal factors. *McGill Journal of Education*, 29, 167-180.
- Lambert, M. (1998). The Distance Education and Training Council: at the cutting edge. *Quality Assurance in Education*, 4 (4), 26-28.
- Landstorm, M., (1995). The perceptions and needs of faculty in distance education courses in a conventional university. *Canadian Journal of Educational Communications*, 24 (2), 149-157.
- Lee, J. (2002) Faculty and administration perceptions of instructional support for distance education. *International Journal of Instructional Media*, 29, (1). 27-44.
- Lee, J. (2001). Instructional support for distance education and faculty motivation, commitment, satisfaction. *British Journal of Educational Technology*, 32, 153-160.

- Lee, V. (1996). Quality assurance at the open learning institute of Hong Kong. *Open Learning*, 11 (1), 59-64.
- Lezberg, A. (1998). Quality control in distance education: The role of regional accreditation. *The American Journal of Distance Education*, 12 (2), 26-35.
- Lomas, L. (1999). The culture and quality of higher education institutions: examining the links. *Quality Assurance in Education*, 7 (1), 30-34.
- Long, P., Tricker, T., Rangecroft, M., Gilroy, P. (2000). Satisfaction with distance education: Evaluation of a service template. *Total Quality Management*, 11, 530-536.
- Lonsdale, A. (1998). Performance appraisal, performance management and quality in higher education: contradictions, issues and guiding principles for the future. *Australian Journal of Education*, 42, 303-320.
- Luther, J. (2000). GL '99 explores "New frontiers in grey literature." [Electronic version]. *Library High Tech News*, 17 (5). Retrieved March 15, 2002 from <http://lucia.emeraldinsight.com/vl=3394732/cl=22/nw=1/rpsv/index.htm>
- Macchia, P. (1992). Total quality education and instructional systems development. *Educational Technology*, 32 (7), 17-21.
- Macchia, P. (1993). Assessing educational process using total-quality-management measurement tools. *Educational Technology*, 33 (5), 48-54.
- Major, H., Levenburg, N. (1998). Distance learning: implications for higher education in the 21st century. *The Technology Source*, Retrieved May 2, 2002, from, <http://ts.mivu.org/default.asp?show=article&id=66>

- Mann, C. (1998). Quality assurance in distance education: The Surrey MA (TESOL) experience. *Distance Education*, 19, 7-9.
- Manohar, K. (Ed.). (1994). *Distance Education in India, Studies in Quality and Qualitative Aspects*. Warangal, India: Indian Distance Education Association, (IDEA).
- Marshall, S. (1998). Professional development and quality in higher education institutions of the 21st century. *Australian Journal of Education*, 42, 321-334.
- McKenna, C., Bull, J. (2000). Quality assurance of computer-assisted assessment: practical and strategic issues. *Quality Assurance in Education*, 8 (1), 24-32.
- McKenzie, B., Roblyer, M. (2000). Distant but not out of touch: What makes an effective distance learning instructor? *Learning and leading with Technology*, 27 (6), 51-53.
- Messner, P. (1998). Management by fact: a model application of performance indicators by an educational leadership department. *The International Journal of Educational*, 12 (1), 23.
- Milheim, W. (2001). Faculty and administrative strategies for the effective implementation of distance education. *British Journal of Educational Technology*, 32, 535-542.
- Miller, C., Clouse, R. (1994). Technology based distance learning: present and future directions in business and education. *Journal of Educational Technology Systems*, 22, 191-204.
- Miller, C., Smith, C. (1998). Professional development by distance education: Does distance lend enhancement? *Cambridge Journal of Education*, 28, 221-230.

- Moller, L. (1991). Planning programs for distance learners using the assure model. *Tech Trends*, 36 (1), 55-57.
- Moore, M. G., & Kearsley, G. (1996). *Distance education: A systems view*. Belmont, CA: Wadsworth Publishing Company.
- Motwani, J., Ashok, K. (1997). The need for implementing total quality management in education. *The International Journal of Educational Management*, 11 (3), 131.
- Mowen, A., Parks, S. (1997). Competitive marketing of distance education: A model for placing quality within a strategic planning context. *The American Journal of Distance Education*, 11 (3), 27-41.
- Murgatroyd, S. (1993). The house of quality: Using QFD for instructional design in distance education. *The American Journal of Distance Education*, 7 (2), 34-48.
- Navaratnam, K., Whitley, P. (1993). Self-management teams for TAFE colleges: balancing quantity and quality in delivery of programmes and services. *Journal of Further and Higher Education*, 17 (3), 25-33.
- Neumann, Y. (1993). Quality of learning experience and students' college outcomes. *The International Journal of Educational Management*, 7 (1), 4-11.
- Nielsen, H. (1997). Quality assessment and quality assurance in distance teacher education. *Distance Education*, 18 (2), 284.
- Nikolova, I., Collis, B. (1998). Flexible learning and design of instruction. *British Journal of Educational Technology*, 29, 59-72.
- Nixon, M., Leftwich, B. (1998). Leading the transition from the traditional classroom to a Distance Learning environment. *T.H.E. Journal*, 26 (1), 54-57.

- Nyíri, J. (1997). Open and Distance Learning in the Information Society. *European Journal of Open and Distance Learning*, Retrieved February 2, 2002.
<http://www1.nks.no/eurodl/shoen/salmon/eden97/nyiri.html>
- O'Donoghue, J., Singh, G., Dorward, L. (2001). Virtual education in universities: a technological imperative. *British Journal of Educational Technology*, 32, 511-523.
- Olcott, D. (1996). Destination 2000: Strategies for Managing Successful Distance Education Programs. [Electronic version]. *Journal of Distance Education/Revue de l'enseignement à distance*, 11 (2), Retrieved February 7, 2002.
<http://cade.icaap.org/>
- Oliver, B. (1996). Keeping quality alive. *Training and Development*, 50 (8), 9-11.
- Owlia, M., Aspinwall, E. (1996). A framework for the dimensions of quality in higher education. *Quality Assurance in Education*, 4 (2), 12-20.
- Owlia, M., Aspinwall, E. (1997). TQM in higher education - a review. *International Journal of Quality & Reliability Management*, 14, 527-543.
- Paist, E. (1997). Distance education and access for people with disabilities. *Open Praxis*, 1, 12-14.
- Pappas, G., Lederman, E., & Broadbent, B. (2001). Monitoring Student Performance in Online Courses: New Game- New Rules. [Electronic version]. *Journal of Distance Education/Revue de l'enseignement à distance*, 16 (2), Retrieved February 7, 2002. <http://cade.icaap.org/>

- Paul, Ross H. (1993). The Management of Distance Learning Systems. [Electronic version]. *Journal of Distance Education/ Revue de l'enseignement à distance*, 8 (2), Retrieved February 7, 2002. <http://cade.icaap.org/>
- Penington, D. (1998). Managing Quality in higher education institutions of the 21st century: a framework for the future. *Australian Journal of Education*, 42, 256-270.
- Poole, Gary. (1997). Back to the Future: What Can We Learn from Current Debates on Educational Technology? [Electronic version]. *Journal of Distance Education/ Revue de l'enseignement à distance*, 12 (1), Retrieved February 7, 2002. <http://cade.icaap.org/>
- Poole, M., Harman, E., Deden, A. (1998). Managing the quality of teaching in higher education institutions in the 21st century. *Australian Journal of Education*, 42, 271-284.
- Priteer, P. (1997). The future of learning in the post-Gutenberg/post industrial era. *British Journal of Educational Technology*, 28, 83-86.
- Purnell, K., Cuskelly, E., Danaher, P. (1996). Improving Distance Education for University Students: Issues and Experiences of Students in Cities and Rural Areas. [Electronic version]. *Journal of Distance Education/ Revue de l'enseignement à distance*, 11 (2), Retrieved February 7, 2002. <http://cade.icaap.org/>
- Race, P. (1995). 'Quality for some'? –What about the rest. *Journal of Further and Higher Education*, 19 (1), 54-61.

- Riche, M. (1992). Organizing for quality service: Improve internal service first. *Tech Trends*, 39 (5), 15-18.
- Roffe, I. (1998). Conceptual problems of continuous quality improvement and innovation in higher education. *Quality Assurance in Education*, 6 (2), 74-82.
- Rumble, G., Harry, K. (Eds.). (1982). *The Distance Teaching Universities*. New York: St. Martin's Press.
- Rumble, G. (2001). Re-inventing distance education, 1971-2001. *International Journal of Lifelong Education*, 20, 31-43.
- Sabar, N. (2001). The uses of the internet for educational purposes in Israel. *Educational Technology Research and Development*, 49, 73-93.
- Saunders, R., Bogue, G. (1992). Feeling the elephant -- The evidence for quality. *Change*, 24 (5), 44-48.
- Schieman, E., Teare, S., McLaren, J., (1992). Towards a Course Development Model for Graduate Level Distance Education. [Electronic version]. *Journal of Distance Education/ Revue de l'enseignement à distance*, 7 (2), Retrieved February 7, 2002. from <http://cade.icaap.org/>
- Shale, D., Gomes, J. (1998). Performance Indicators and University Distance Education Providers. [Electronic version]. *Journal of Distance Education/ Revue de l'enseignement à distance*, 13 (1), Retrieved February 7, 2002. <http://cade.icaap.org/>
- Singh, B. (1987). The Planning and Management of Distance Education. [Electronic version]. *Journal of Distance Education/ Revue de l'enseignement à distance*, 2 (2), Retrieved February 7, 2002. <http://cade.icaap.org/>

- Spallek, H., Berthold, P., Shanley, D., Attstrom. (2000). Distance education for dentists: Improving the quality of online instruction. *The American Journal of Distance Education*, 14 (2), 49-59.
- Springer, S., Pevoto, B. (2001). Principles for development of a 21st century distance learning program on the college and university level. *Journal of Educational Technology Systems*, 30, 43-52.
- Stampen, J., Hansen, L. (1999). Improving Higher Education Access and Persistence: New Directions From a 'Systems Perspective'. *Educational Evaluation and Policy Analysis*, 21, 417-426.
- Stevenson, K., Sander, P., (1998). Improving Service Quality in Distance Education. *European Journal of Open and Distance Learning*, Retrieved February 2, 2002. <http://www1.nks.no/eurodl/eurodlen/index.html>
- Tait, A. (1993). Systems, values, and dissent: quality assurance for open and distance learning. *Distance Education*, 14, 303-314.
- Taylor, JC (1995). "Distance education technologies: The fourth generation." *Australian Journal of Educational Technology*, 11, 2, 1-7.
- Thach, E., Murphy, K. (1995). Competencies for distance education professionals. *Educational Technology Research and Development*, 43, 57-79.
- The Journal of Integrative Psychology Website*. (n.d.). Retrieved February, 26, 2002. <http://www.integrativepsychology.org/>
- Tovey, P. (1992). Assuring Quality: Current practice and future directions in continuing professional education. *Studies in the Education of Adults*, 24 (2), 125-142.

- Trantin, G. (2000). The quality-interactivity relationship in distance education. *Educational Technology*, 4, (1), 17-27.
- Van den Branden, J., Lambert, J. (1999). Cultural issues related to transnational open and distance learning in universities: A European problem? *British Journal of Educational Technology*, 30, 251-260.
- Van Vught, F., Westerheijden, D. (1994). Towards a general model of quality assessment in higher education. *Higher Education*, 28, 355-371.
- Viljoen, J., Holt, D., Petzall, S. (1991). Quality Management in an MBA Program by Distance Education. [Electronic version]. *Journal of Distance Education/ Revue de l'enseignement à distance*, 6 (2), Retrieved February 7, 2002.
<http://cade.icaap.org/>
- Walker, R., McIlroy, A. (1993). Total quality management: some implications for the management of distance education. *Distance Education*, 14, 40-54.
- Wang, S. (1994). Basic considerations of distance education programs. *International Journal of Instructional Media*, 21 (1), 53-62.
- Weigel, V. (2000). E-learning and the tradeoff between richness and reach in higher education. *Change*, 32 (5), 5-15.
- Weller, J., David, L. (1996). Return on quality: a new factor in assessing quality efforts. *The International Journal of Educational Management*, 10 (1), 30.
- Weller, L., Humberstone, G. (1997). Strategic Management of Quality: An American and British Perspective. *Journal of Research and Development in Education*, 30, 201-213.

- Welsh, J., Dey, S. (2002). Quality measurement and quality assurance in higher education. *Quality Assurance in Education*, 10 (1), 17-25.
- Wolcott, L. (1997). Faculty development issues in distance education. *Open Praxis*, 1, 34-36.
- Willborn, W. Karapetrovic, S. (1999). Holonic model for a quality system in academia. *International Journal of Quality & Reliability Management*, 16, 457-485.
- Williams, G. (1993). Total quality management in higher education: panacea or placebo? *Higher Education*, 25, 229-237.
- Williams, M. (1994). Quality management and training design. Educational Training and Development International. *Educational Training and Technology International*, 31, 121-125.
- Willingham, S., (November, 2000). Advanced software bolsters distance learning program. *National Defense*, 85 (564), 74-76.
- Wills, J. (1995). The post-postmodern university. *Change*, 27 (2), 59-63.
- Winn, B., Cameron, K. (1998). Organizational quality: an examination of the Malcom Baldrige national equity framework. *Research in Higher Education*, 39, 491-511.
- Yang, B., Cervero, R. (2001). Power and influence styles in programme planning: relationship with organizational political contexts. *International Journal of Lifelong Education*, 20, 289-296.
- Yudof, M., Busch-Vishniac, I (1996). Total quality. *Change*, 28 (6), 18-27.