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The Role of the Site Facilitator in the New Directions in Distance Learning Project

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DISSERTATION

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Abstract

THE ROLE OF THE SITE FACILITATOR IN THE
NEW DIRECTIONS IN DISTANCE LEARNING PROJECT

The purpose of this study was to understand the roles and responsibilities of site facilitators in successful New Directions in Distance Learning (NDDL) project school sites, to learn with whom site facilitators communicate within and outside their working environments, and to discover with whom they build working relationships. E-mail questionnaires and two sets of telephone interviews generated the research data from six site facilitators and three teacher-mentors who worked at eight New Directions in Distance Learning (NDDL) school sites located throughout British Columbia. Indicators of success for an NDDL site included participation in the NDDL project with minimal technical difficulties as well as completion of and registration in NDDL courses by students. Data indicated that a designated room in the school for NDDL student-mentor conferencing and instruction with the necessary computer equipment, support from parents and increased student independence also characterized a successful site.

In addition to their current roles of maintaining technological learning environments, establishing triad communication, instructing students in course work, and completing administrative tasks, the role of student advocate emerged as a result of the site facilitator's proximity to the student and of the relationship that developed between the student and the site facilitator.

Data indicated that site facilitators required training

in technology, mediation and negotiation, in light of the student advocate role. Study participants recommended the necessity for specific training in site facilitation and online training.

Participants reported that a site facilitator's network consisted of communication links with students, teacher-mentors, school administrators, school staff and NDDL project administrators, who worked either within or outside the site facilitator's working environment. Site facilitators also established relationships with the other triad members, teacher-mentors and students, school personnel, and NDDL project administration.

The leadership model that best described the NDDL project was collaboration. The NDDL project met the definition and the criteria listed by Chrislip and Larson (1994).

Further research is recommended on the roles and responsibilities of the teacher-mentor; the site facilitator role of student advocate; the training in facilitation, negotiation, and mediation skills; and the leadership model of the NDDL project to identify the stakeholders in the project, as well as clarify issues concerning decision-making and accountability.

Accountability of site facilitators to the NDDL project and to other stakeholders also requires further exploration, because at the time of this study, site facilitators lacked clarity regarding to whom they were accountable.

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CHAPTER ONE: THE PROBLEM

Meeting the educational needs of rural, school aged children is the primary purpose of correspondence education. Correspondence education consists of a dialogue between a student and a tutor, using mail and telephone conferencing as the means of delivering school courses. School districts in British Columbia, Canada, have offered correspondence courses to registered school students at all levels of schooling for many years. In most cases, students register in correspondence courses for the following reasons: schools are unable to offer the required courses for graduation; students fail to complete a course; students live in a very remote location; or students cite personal reasons, such as illness, that required extended periods of time away from school.

For students who live in rural communities, correspondence education is one method of completing course work. Recently, the term 'distance education' describes a newer or updated form of correspondence education that employs technology. At the time of this study, the New Directions in Distance Learning (NDDL) project, was a distance learning program operated by the Open School, a division of the Open Learning Agency, located in Burnaby, British Columbia. The NDDL project combined the goals, objectives and activities of correspondence education with distance education technology. This project offered high school graduation courses to students in small secondary schools, adult and continuing education centres, and at home around B.C." (NDDL, 1998, website). On April 15, 1998, Enid

McCauley, the Associate Director of the Open School, sent a memorandum to all secondary schools in British Columbia detailing the future plans of the NDDL project. She stated that during the 1998-99 academic school year, the Distance Education Schools will offer the NDDL project "as the secondary component of a full K-12 electronically delivered program called 'Connect'". She also clarified that the "Open School will no longer be offering NDDL as a separate program." (McCauley, 1998, website). The findings of this study reflect the NDDL project under the direction of the Open School.

The NDDL project clients were students who were registered in a high school and needed to complete correspondence courses for graduation. The project served school-based and home-based students. Students enrolled in the NDDL project completed distance education courses by entering into a triad learning model, consisting of a student, a teacher-mentor, and a site facilitator.

The site facilitator has emerged as a key team member in the triad, providing the only face-to-face communication with the distance education student. Communication bridges among the onsite students, the teacher-mentors and other components of distance education, such as Distance Education Schools or school boards, had developed and were maintained by the site facilitator. The need to study the role of the site facilitator is important because there have been no direct observations of site facilitator activities, because site facilitators were situated throughout the province of British Columbia.

Statement of the Problem

The goal of this study was to understand the roles of site facilitators in successful NDDL project school sites and to learn with whom site facilitators communicated at their school sites that ensured the success of the program. In addition, this study attempted to discover if site facilitators communicated with anyone outside of their school sites to ensure the success of the program.

The term 'success', for this study, was defined by the NDDL project administration as a school's ability to participate in the NDDL project with minimal technological problems. Also, other indicators of success included students completing course work, as well as students returning to the NDDL project to complete successive courses.

Background of the Problem

Offering correspondence courses to high school students, particularly in small, rural communities, has been a common practice for many years. Rowntree (1996) defined correspondence education as "correspondence students and their tutor carrying on a dialogue, in writing or on the telephone, usually based on the student's assignment work and providing the student with a continuing constructive response and formative feedback to what he or she is making of the subject being studied" (E-mail to DEOS-L listserv). With the accessibility to technological resources and the proficiency displayed by students using these resources, it seemed a natural progression to combine correspondence education with technology. Distance education emerged as a result of this combination. Rowntree (1996) differentiated correspondence

education from distance education. He defined distance education as "technology - one that enables learners to learn without being in the same place as their teacher, e.g. with the aid of self-teaching materials (like specially prepared workbooks, textbooks, multimedia packages), WWW (World Wide Web) materials, resources available in community or workplace, conferencing and, correspondence with a supportive distant tutor" (E-mail to DEOS-L listserv). A common denominator, in both correspondence education and distance education, was the necessity of tutors.

Tutor roles and responsibilities included giving advice, maintaining regular contact with students, marking assignments and providing instruction and information on the subject being studied. Because there was a geographical separation between the tutor and the student, tutors carried out these roles and responsibilities via mail, telephone, E-mail, fax, computer conferencing, chatline forums, and video conferencing.

In the New Directions in Distance Learning project (NDDL), the tutor evolved into a teacher-mentor, who became the course subject specialist. The Teacher-Mentor's Guide, in the *NDDL Learning Guides* (1997), defined the role of the teacher-mentor as "[adding] ... expertise to existing course material and [ensuring] student success" (p.2). Teacher-mentors employed the following strategies to accomplish this task:

> provide clarification of course content, conduct tutorial and remedial instructional sessions with students, maintain contact with students and teacher-

> facilitators, assess student assignment submissions, track student progress in cooperation [sic] with on-site teacher-facilitators, and incorporate the appropriate resources and technologies into your teaching strategies. (p.2)

In response to the integration and employment of technological resources, the NDDL project added a new member to the tutor-student team, the site facilitator. This person completed the NDDL triad learning model of student, teacher-mentor, and site facilitator.

According to the *NDDL Learning Guides* (1997), site facilitators fulfilled three functions. First, they assisted students with technological problems, by providing computer instruction or software tutorials. Second, they provided assistance with procedural problems, such as collecting and distributing assignments, And third, they provided support and functioned as a communication bridge between the distance learning tutor and the distance education student. NDDL site facilitators worked in the high schools, as well as in the Distance Education Schools, and the Continuing Education Centers.

Importance of the Study

At the time of this study, the New Directions in Distance Learning project (NDDL) was a collaborative effort involving the Open Learning Agency, the Technology and Distance Education Branch (TDEB) of the Ministry of Education, Skills and Training of the Province of British Columbia, the Open School, the Distance Education Schools, participating school districts and participating schools. The

project was available to school districts throughout the province of British Columbia, Canada. Each of the above mentioned entities fulfilled a responsibility to the NDDL project.

The Technology and Distance Education Branch (TDEB) developed "structurally-sound learning materials for the schools. This branch [was] also responsible for ordering, processing, and distributing learning resource materials" (TDEB, 1996, website). Supporting this organization was the Open School and the Distance Education Schools. They served the administrative function in terms of student registration and material distribution, such as texts, workbooks and course examinations. The New Directions in Distance Learning (NDDL) project, which fell under the auspice of the Open Learning Agency's Open School, provided a technological environment in which students completed correspondence courses. The technological environment included computer hardware and specific software (FirstClass) necessary for course information retrieval and communication with the teacher-mentor. A course teacher-mentor assigned by the NDDL project assisted students in course completion. The school district provided the funding for the installation of required telephone and data lines, computer hardware and software, while the school provided the student with a place to work, and a site facilitator.

The school site facilitator provided the distance education student with the only face-to-face communication in this type of learning experience. The exception to this statement was in circumstances in which the site facilitator

and the teacher-mentor were the same person. Communication from other components of the NDDL project and organizations or institutions outside of the NDDL project filtered through the site facilitator. Some examples of this were Distance Education School administrators requesting information regarding course registration, or the local community college inquiring about the variety of technology employed in the NDDL project and courses available to their students.

Due to the crucial role of the high school site facilitator, authentic site facilitator roles and responsibilities required further exploration. A review of the literature revealed a dearth of information with respect to the roles and responsibilities of high school site facilitators in distance education.

Purpose of the Study

The purpose of this study was to understand the role of site facilitators in successful New Directions in Distance Learning (NDDL) school sites; to learn with whom site facilitators communicate within their school sites and outside of their school sites that ensured the success of the program at the school site. A qualitative study employing E-mail questionnaires and telephone interviews generated the data from selected NDDL project site facilitators and teacher-mentors.

Research Questions

This study attempted to answer the following questions:

1. What are the roles of site facilitators in successful NDDL project school sites?

2. Who do site facilitators communicate with within

their school sites to ensure the success of the New Directions in Distance Learning project at the school site?

3. Who do site facilitators communicate with outside their working environment to ensure the success of the New Directions in Distance Learning project at the school site?

4. What relationships are created and maintained by site facilitators?

Assumptions of the Study

This study assumed that schools participating in the New Directions in Distance Learning project (NDDL), met the commitments for participation in the NDDL project. These commitments, as outlined by the NDDL project, included provision of a network, the required equipment and course materials, the required phone and data lines, a work site for the NDDL students, and a site facilitator.(See Appendix K for NDDL commitments.)

A second assumption was that site facilitators and teacher-mentors wanted to contribute their knowledge and expertise for this study.

A third assumption was that site facilitators were accountable to the NDDL project.

Delimitations of the Study

The researcher delimited this study to gather data from NDDL site facilitators and teacher-mentors. Data was specific to this population. No data was collected from distance education students or any other individuals that may be associated with the NDDL project.

Furthermore, NDDL project administration defined the term 'success' as school participation in the project with

minimal technical difficulties, in addition to students completing NDDL courses, and NDDL students returning to the NDDL project to continue in successive courses.

Specific Terminology

Distance Education: "provides course instruction via video conferencing, satellite, video & audio, the Internet" (Logan, 1997, E-mail). For this study, the term distance education was used, having the meaning of "learning that takes place between geographically dispersed sites, the teacher in one location, the students in others" (Finkel, 1991, p. 126).

Distance Learning: is synonymous with distance education.

Correspondence Education: "subjects which can be taught by the lecture method alone"(p.6); "a method of teaching in which the teacher bears the responsibility of imparting knowledge and skill to a student who does not receive instruction orally, but who studies in a place and at a time determined by his individual circumstances" (Erdos, 1967, p.10).

Open Learning: "giving learners more access to learning and more choice and control over what and how they learn" (Rowntree, 1996, E-mail).

Distributed Learning: "an umbrella term to include technology enhanced teaching and learning that uses instructional and information technology to serve all students" (Truman, 1997, E-mail).

New Directions in Distance Learning (NDDL): a collaborative project of the Open Learning Agency's Schools Program, the Technology and Distance Education Branch of the Ministry of Education of British Columbia, and the nine Distance

Education Schools.

Regional Distance Education Schools: there are nine schools in the province of British Columbia offering correspondence courses, grades Kindergarten to grade twelve. Course materials are developed by the Technology and Distance Education Branch of the Ministry of Education of British Columbia.

Technology and Distance Education Branch (TDEB): a department within the Ministry of Education that provides distance education and technology-based services and materials. (URL: http://www.educ.gov.bc.ca/tdeb,1996).

Open Learning Agency (OLA): "a unique, fully accredited publicly funded educational leader providing a wide range of formal and informal educational and training opportunities for learners around the world. We achieve this by using various technologies and by working in partnership with other organizations" (URL: http://www.ola.bc.ca/ola/about.html, 1996).

Mentor: a teacher-mentor who is a specialist in the subject matter. (NDDL Handbook, 1996, p.1) A person who provides course content, evaluates and tracks student progress, and provides tutoring.

Tutor: "a person . . . who facilitates learning by acting as a consultant, helper, arbiter and reference point for individuals and groups of open and distance learners" (Whiting, 1987, p.32).

FirstClass Server: a server that offers computer conferencing capabilities to students, teacher-mentors, and site facilitators. A user logs in to collect mail and join into

online discussions.

Server: the control computer on a local-area network. The server controls software, printers and other parts of the network. The server allows sharing of network resources (Kobler, 1996).

Hardware: any part of a computer system that can be touched (Kobler, 1996).

Software: a set of instructions that tell the computer what to do; also called a program (Kobler, 1996).

E-mail: "Text messages sent through a network to a specified individual or group. Besides a message, an E-mail also may have an attached file or graphic. E-mail has a big advantage over 'snail-mail' (the nickname for postal mail): speed. E-mail can be delivered within seconds or minutes across thousands of miles. Also may be spelled E-mail or e-mail" (Kobler, 1996, p. 102).

Computer conferencing: "Communication among people at different locations using computers connected through communications services and equipment. Computer conferencing allows many people to share the same information at one time" (Kobler, 1996, p.79).

Graphic tablet: "a rectangular, flat input device that lets you control an on-screen cursor by tracing your finger or a stylus [a pen shaped instrument] across the surface of the tablet" (Kobler, 1996, p.120, 184).

Learning Guides: a manual containing information, instruction, and strategies for teacher-mentors, site facilitators and students, members of the NDDL triad learning model. These manuals are given to all triad members upon

registration in an NDDL course.

Polycom: a communication device that contains three microphones and is used for telephone conferencing.

NDDL project administration: a team of 8 individuals consisting of two directors, a project manager, a project coordinator, a project assistant, a field coordinator, an instructional systems coordinator, and a mentor coordinator (NDDL Contacts List, 1997, FirstClass server).

CHAPTER TWO: REVIEW OF LITERATURE

Introduction

This chapter is organized into four interlocking concepts that pertain to distance education. The first section provides a brief overview of correspondence education and distance education, and the transition of one to the other. Also in this section is a look at the various terms practitioners use when discussing learning at a distance. The second section discusses the definition of communication from a distance education perspective, as well as four modes of communication employed in the distance education environment: audio conferencing, electronic mail, facsimile, and videoconferencing. The third section describes Stohl's concept of networking, in addition to collaborative leadership. Lastly, the roles, responsibilities, and training of tutors and site facilitators is the focus of the fourth section.

Correspondence Education.

Correspondence education provides education to students and adults at a distance. Erdos (1967) defined correspondence education as "teaching in all subjects which can be taught by the lecture method alone" (p.6). Rowntree (1996), a distance education practitioner, defined correspondence education as "students and their tutor carrying on a dialogue, in writing or on the phone" (email correspondence to DEOS listserv). Stewart (1988), also a practitioner, further refined the definition, clarifying that "the student may learn when he wants, whatever the hour day or night; he may learn wherever

he wants; he may learn at his own pace" (p.47). School districts and school boards, both in Canada and in the United States, have offered this service for many years.

Correspondence education began as early as the 1900's as a viable means of delivering education to students who lived in remote, geographical areas. The pioneer in this educational delivery was Western Australia. Many school-aged children lived in the outback, the unsettled, isolated regions of Australia, and for this reason home schooling, using correspondence education was the only method of instruction available to parents wishing to ensure their child's education.

The first example of correspondence education, in Australia, was an itinerant teacher in a "tent school". It brought "pupils and their teachers together in a place set aside for learning" (Higgins, 1981, ED 350 138). Teachers travelled to the remote regions first by horse, and then by car. A shortage of teachers in 1922 resulted in the replacement of the itinerant teacher with paper and letters of instruction. After several years, and later taking advantage of technologies, such as radio and television, the tent schools evolved into a national correspondence program. The development of the correspondence program included The School of the Air, radio broadcasts of course curricula, in addition to transmissions of course curricula via television. Yet radio broadcasts were still a popular method of receiving instruction, either through broadcasting systems or through citizen-band radio systems. This type of two-way radio broadcasting restored some of the human element that was

missing from correspondence education.

All of the above delivery methods demonstrated the common characteristic of limited face-to-face communication between students and teachers or tutors. In fact, Keegan's (1996) research of distance education technology has concluded that the term correspondence education "is needed to designate the postal sub-group of the print-based forms of distance education in which compulsory or voluntary meetings are not felt necessary" (p.35).

Today, with technological advancements coupled with increased 'user-friendliness' of computer hardware and software, educational institutions deliver correspondence courses to students with increased communication between the tutor and the student, and decreased delivery time of mailing course materials. One term practitioners use to describe the above course delivery is distance education.

Distance Education.

Distance education from Stewart's (1988) perspective "[liberated] the student/teacher interface from the strait-jacket of the lecture hall or tutorial room" (p.47). Substantiating this viewpoint, the term distance education subscribes to a method of learning which allows students to choose the course of study and to determine how, when, and where the course will be completed. Open learning, in particular, connotes the concept that it provides an opportunity for individuals to participate in the programming of their study regardless of their location or circumstance. In essence, distance education gives students the opportunity to control their own learning styles and learning

environments.

For this study, a question that still required an answer was 'what is distance education.' Distance education was only one of a few terms used to describe teaching and learning at a distance. Other terms included distance learning, open learning, distributed learning, asynchronous distance education, synchronous distance education, and mediated learning. Each term represented a different concept or aspect of distance education. A search of definitions for each of the above terms has lead to the realization that there were many interpretations for each individual term. Below, each term has been defined by either a scholar or a distance education practitioner.

Trepathi (1998) viewed distance education as "conveying knowledge from a distance" and distance learning as "the desired product of DE [distance education]" (email correspondence to DEOS listserv). Open learning, Lewis (1984) explained, "tries to remove barriers that prevent attendance at more traditional courses but it also suggests a learner centered philosophy" (p.92). Truman's (1997) view of distributed learning was "distributing seat time with virtual activities, using multimode technology' (email correspondence to DEOS listserv). And Trepathi (1998) defined asynchronous distance education as "interaction between instructor and student [that] does not take place simultaneously, e.g. traditional correspondence." He contrasted this definition with synchronous distance education, which he defined as "DE [distance education] that takes place [in] real time, but in different locations, the virtual classroom" (email

correspondence to DEOS listserv).

Distance education administrators, educators and coordinators, employed various terms for distance education. For example, Logan's term for what Trepathi called synchronous distance education was distance education. She commented that distance education courses which "[provided] course instruction via video conferencing, satellite, video & audio, the Internet ... [had] a rigid format in most cases" (1997, listserv email). She illustrated her point, stating that correspondence courses were "very limited in the way of instructor support and have very little interaction" (1997, listserv email). In other words, distance education, using video conferencing, had not allowed students to study when they want, based on the scheduling of video conferences, audio conferences, or satellite transmissions of course materials. Keegan (1996) agreed with Logan's point, and described some of the advantages and constraints pertaining to virtual education. As an advantage, virtual education reestablished face-to-face communication by using video conferencing. Keegan pointed out that "virtual education uses mainly time synchronous technologies" (p.9). This meant that communication, or in the case of distance education, virtual classes would be held at regular intervals. Consequently, Keegan continued, "virtual education [would reimpose] much of the constraints of conventional education by requiring students to travel to virtual classrooms at fixed times, on fixed days to join a learning group" (p.9).

From another perspective, Rowntree (1996) viewed distance learning as "technology - one that [enable] learners

to learn without being in the same place as their teacher" (email correspondence to DEOS listserv). In support, Reynolds (1996) strengthened the argument by stating that distance education was "an implementation of one facet of the open learning philosophy: that of removing the barriers of space (and probably time)" (email correspondence to DEOS listserv). Hence, distance education was the application of technology. Dugas (1997) added that distance learning was not "wedded to high tech [sic] developments beyond the reach of so many people" (email correspondence to DEOS listserv). He suggested that any person with a computer was able to partake in a distance learning course.

Disagreements also resided in deciding whether or not distance learning was a delivery system of education. In support of the argument, Howard-Vital (1995) stated "distance learning ...has begun to evolve into a interactive, instructional delivery system" (p.196). To the contrary, Dugas (1997) asserted that distance learning was "a philosophy of providing educational opportunity away from a central location" (email correspondence to DEOS listserv). The delivery method, he elucidated, "should be based on the course content and the tools available to the student" (email correspondence to DEOS listserv). In short, there were some fundamental differences in defining distance learning. In view of these disagreements, Keegan (1996) suggested that distance learning should embrace the following characteristics:

- the quasi-permanent separation of teacher and learner throughout the length of the learning process;

> • the influence of an education organization both in the planning and preparation of learning materials and in the provision of student support services;
> • the use of technical media - print, audio, video, or computer - to unite teacher and learner and carry the content of the course;
> • the provision of two-way communication so that the student may benefit from or even initiate dialogue; and
> • the quasi-permanent absence of the learning group throughout the length of the learning process so that people are usually taught as individuals rather than in groups, with the possibility of occasional meetings, either face-to-face or by electronic means, for both didactic and socialization purposes (p.50).

Common components in both correspondence education and distance education were an educational institution, an assigned tutor, and a student. The educational institution provided the course and examination materials and the name of the course tutor. Erdos (1967) stated that educational institutions developed course materials "in all subjects which [could] be taught by the lecture method alone" (p.6). Included in a materials package were textbooks, workbooks, envelopes for mail-in assignments and additional resources necessary to complete the work, such as cassette tapes for foreign language courses.

Distance education material was very similar to correspondence material; additional information provided to students were instructions on how to run the various computer hardware and software programs, and a list of activities that

required the use of technological resources.

The tutor, assigned to the student by the educational institution, was someone who "[facilitated] learning ... for individuals and groups of open and distance learners" (Whiting, 1987, p.32). According to Lewis (1984), the tutor's objective, within the guidelines of correspondence education, was "to build the learner's confidence [and] to help him [sic] become more autonomous" (p.40). Essentially, the tutor provided advice and general support through counselling, study skills development, and assistance in times of difficulties or illness. Students, who received home schooling, received instruction and guidance, not only from the tutor, but from their parents as well.

At the time of this study, correspondence and distance education students included children and adults, with varying levels of education, who fulfilled societal roles such as students, parents, employers, and employees. Their responsibilities, as correspondence or distance education students, included completing and mailing in course work and projects, writing course examinations, learning the material being studied, and maintaining regular contact with the tutor.

Communication

Technology has increased the amount of communication between the student and the tutor. Furthermore, growth in communication technology, in hardware and software, has continued to increase the frequency of communication between the student and the tutor. The aim of the technological growth was to reestablish face-to-face communication.

This section focusses on the definitions of communication as it pertains to correspondence and distance education. Furthermore, three forms of communications (face-to-face, two-way, guided didactic conversation), as well as four modes of communication (audio conferencing, electronic mail, facsimile, video conferencing) are explored.

Definition of Communication

Random House Webster's College Dictionary (1997) listed two definitions of communication, "the act or process of communicating" and "the imparting or interchange of thoughts, opinions, or information by speech, writing or signs" (p.266). Within the same definition, the term 'communications' was specifically defined as "the techniques used to communicate information" (p.266). These three separate definitions, when combined, were at the heart of distance education. To better our understanding of communication, Tiffin and Rajasingham (1996) contributed their definition which consisted of communication fulfilling three fundamental functions, "...to transmit information over space, to store information over time, and to process information so that it is regenerated..." (p.26). Based on the definitions above, communication was a process in which information moved from a sender to a receiver, using a particular means or method to move the information. Three forms of communication commonly used in correspondence and distance education were face-to-face communication, two-way communication and didactic conversation.

Face-to-face Communication

Face-to-face communication connoted close, visual

contact between sender and receiver. The understanding and intent of transmitted messages relied on eye contact, facial expressions, tone of voice, inflection, body gestures, and body placement and position in relation to the other person. Face-to-face communication, within the field of education, commonly termed "conventional education" by distance educators, applied to "formal classroom-based instruction in a school, college, or university setting, where teacher and students [were] physically present at the same time, at the same place" (Keegan, 1996, p.25). Therefore, scholars and educators of regular and distance education programs associated face-to-face communication with the school classroom. Tiffin and Rajasingham (1996) presented a communication pattern called a star network that demonstrated how face-to-face communication occurred in a classroom: "in a star network, communication [radiated] from a central node (teacher) to other nodes (learners, who are expected to communicate with one another through the central node)" (p.59). There were three patterns of the star network. The first pattern identified the teacher as the central mode; the second pattern exhibited a dyadic exchange between the teacher and a student while other students listen; and the third pattern showed communication occurring between all students.

In the distance education environment, the star network was still evident in the distance education model, particularly, for example, during an audio conference when the tutor spoke to one student and other students attending the conference listened to their conversation.

Face-to-face communication could be recreated through "virtual or electronic classrooms [which would] be linked by satellite, or by compressed video codec technology or by full bandwidth links" which would make it "possible for the first time in history to teach face-to-face at a distance" (Keegan, 1996, p.8). Keegan's statement alluded to the continued importance of the tutor to assist students with comprehension of received messages and to provide simultaneous feedback.

Two-way Communication

John A. Bååth's research regarding two way communication examined the applicability of various teaching models to correspondence education (cited in Keegan, 1996). He demonstrated that two-way communication could be applied to correspondence education as functions, such as checking student achievement, determining previous knowledge of each student, formulating individual discussion comments, providing individual assistance, checking assignments for submission, and providing motivation. Bååth concluded that if the teaching model supported strict control of learning, then a greater emphasis was placed on the teaching material. In contrast, he determined that if the teaching model loosened the control of learning, then there was a tendency toward simultaneous communication between the student and the teacher in the forms of telephone contacts or face-to-face (Keegan, 1996). What this meant was that if emphasis of teaching was placed on the structure of the learning, for example completing worksheets and workbook exercises, or reading a text book and answering related questions, then the tutor structured the communication with the student along the

lines of asking questions and receiving answers. The student became more dependent on the learning material, than on the communication with the tutor.

If the emphasis of teaching was to teach the material, as well as the student, then communication between the tutor and the student became less structured and more conducive to a more relaxed conversation style of communication.

The prevailing purpose of two-way communication was to provide assistance to the student, in starting the course, working through the activities, through to completing the course. Guided didactic conversations took the connotation of two-way communication a step further.

Didactic Conversations

Keegan (1996) discussed didactic conversations, making references to the research conducted by Börje Holmberg between the years 1960 to 1983. Holmberg, Keegan pointed out, believed that the learning of the student was of primary importance. Furthermore, Holmberg identified activities such as "administration, counselling, teaching, group work, enrolment and evaluation" as support systems, if and when they supported the learning. (cited in Keegan, 1996) In his research, Holmberg devoted much time to examining two-way communication and didactic conversations.

A didactic conversation, in Holmberg's view, was "a relationship between the supporting organization and the student," (cited in Keegan, 1996, p.94) the key concept being 'relationship.' Keegan referred to Wedemeyer's (1963) work to further illustrate the importance of a relationship between the tutor and the student:

> the secret of success [of correspondence instruction] is placed squarely on the shoulders of the instructor who is in a continuous tutorial relationship with the correspondence student. The teacher is the daily monitor and motivator of the distance student. The chief value of the correspondence method lies in the tutorial relationship developed between the teacher and the student. (p.65)

Keegan continued along this line of thought. He viewed a didactic conversation as a continuous interaction between the tutor and the student in the form of a conversation. Conversations, not only facilitated learning, they also supported the development of relationships. Further to the building of relationships, Holmberg offered seven positive effects, or as Keegan called them, seven bases for distance education being a guided didactic conversation. The seven bases were

1. that feelings of personal relation between the teaching and learning parties promote study pleasure and motivation;
2. that such feelings can be fostered by well developed self-instructional material and suitable two-way communication at a distance;
3. that intellectual pleasure and study motivation are favourable to the attainment of study goals and the use of proper study processes and methods;
4. that the atmosphere, language, and conventions of friendly conversation favour feelings of personal relation according to postulate 1;

5. that messages given and received in conversational forms are comparatively easily understood and remembered;

6. that the conversation concept can be successfully translated for use by the media available to distance education; [and]

7. that planning and guiding the work, whether provided by the teaching organization or the student, are necessary for organized study, which is characterized by explicit or implicit goal concepts.

(Holmberg, cited in Keegan, 1996, p.96)

In short, Holmberg's studies (cited in Keegan, 1996) focussed on the student and the learning. Student independence and autonomy, he felt, were components of the didactic conversation. He also maintained that it was important to not only support the learning, but to facilitate it by developing relationships that employ self-instructed material, as well as establish study goals, processes and methods. Specifically, the relationship assisted the student in developing a planning guide which outlined implicit and explicit goals (Keegan, 1996). Communication within the relationship, the sending and receiving of messages between the student and the tutor, were in conversational form. Furthermore, the conversational form of the communication lent itself to the various modes of communication employed in distance education.

Modes of Communication

The modes of communication used to carry out two-way communication or guided didactic conversations include audio

conferencing, electronic mail, facsimile, and videoconferencing. Educational institutions and tutors regularly employ each of above modes of communication, except for videoconferencing, due to the cost of a conference.

Audio Conferencing

Audio conferencing is popular among distance educators because it brings "people together by means of the telephone. In their familiar 'conference call' form, such conferences enable geographically dispersed ... members to come together for an hour or two, without the need to travel to a centralised site" (Stolovitch & Keeps, 1992, p.515).

Tiffin & Rajasingham (1996) reported a few problems with audio conferencing. For example, one problem was that "telephone systems were not designed for more than two links" (p.103); therefore, there were problems with sound quality, volume, echo formation, and ambient sound. Another problem was learner frustration because there were no visual clues to fall back on when hearing became difficult. In addition, participants were required to learn the protocols for speaking and how to talk into microphones. And yet, despite these problems, audio conferencing is the quickest and least technically-involved means of gathering and sending information. Other reasons for its popularity, Mauger and Bouchart (1991) explained, included a reduction or diminished feeling of isolation when there was a lack of face-to-face communication, and an increase in feeling a "warmth" from the tutor, who "expressed [it] more easily and effectively by the voice than in writing" (p.93). In the future, fibre-optic technology would offer digital transmission of information,

transmitting or receiving "voice, video and data at the same time" (Tiffin & Rajasingham, 1996, p.103).

Electronic Mail

Electronic mail, commonly called E-mail, permits the sender to send typed information, as well as pictures, sound and executable documents, to a receiver with an E-mail address. Information "stashed in an Inbox...is kept, deleted, replied to, or forwarded to another recipient, depending on [the] E-mail program" (Kobler, 1997, p.102). Senders of messages and information rely on the quick, efficient, and direct delivery to the designated receiver. It is for this reason, as well as the direct mailing, the addition of pictures, voice and 'smilies' that E-mail emerged as a medium with a more conversational tone. Smilies add the emotional feelings associated with the content of an E-mail message. Smilies are combinations of punctuation marks, letters or numbers used to convey feelings. For example, a colon combined with a dash and a right parenthesis :-) is the most common smilie, used to show one's joy over a funny remark just made. It also means "a surfer wants to share his cheerful state of mind" (Andersson, 1997, website). Another example is a colon and a left square bracket :[which conveys the feeling "I just feel so depressed" (Andersson, 1997, website). (See Appendix I for additional examples of Smilies).

In a distance education environment, E-mail communication between the mentor and the student is direct. However, there is no guarantee that the message sent would be read and replied to within a twenty-four hour period. But E-

mail creates a sense of building a closer relationship between the mentor and the student.

Facsimile

Facsimile, commonly referred to as a fax, is a duplicate copy of a document, or "a picture of your page" (Negroponte, 1995, p.184). Documents sent via facsimile machines are transmitted over long distances through telephone lines. Negroponte explained that "the scanner in the facsimile machine would generate a fine line-by-line map with 1s and 0s representing the black and white of ink and no ink" (p.184). Documents are sent, not only by facsimile machines, but also by computer using communication software coupled with a data/fax modem. In distance education, before E-mail, mentors and student used the facsimile to send documents, assignments, instructors' comments and students' questions. Because of the cost of long distance phone charges, or the monthly fees of the internet service provider, mail delivered by a postal service, or 'snail mail', the term used by computer users, was the preferred method of sending documents for correspondence students.

Videoconferencing

All of the above methods of communication lack face-to-face contact between sender and receiver. Videoconferencing attempts to remedy this problem.

Videoconferencing uses "video cameras and monitors at each centre so that the participants can see as well as hear one another" (Tiffin & Rajasingham, 1996, p.110). Business companies and larger educational institutions, such as colleges or universities, employ this form of communication

to show people with whom they were conversing. Some problems with videoconferencing are the necessity of large amounts of bandwidth, and the cost of compression techniques to allow video transmission over existing bandwidth. This in turn results in the problems of low picture definition and a 'jerky' motion picture. In distance education, particularly at the high school level, educational institutions and mentors rarely use video conferencing. The other forms of sending data and information are more popular and convenient.

These modes of communication have not only allowed students and tutors to communicate with one another, but also have offered to them the opportunities to build relationships. But the relationships were not limited to the student-tutor. Both students and tutors communicated with other individuals, and while they formed relationships, these relationships, in turn, emerged as separate and interconnected networks.

Networks

In his book *Dig your well before you're thirsty* (1990), Harvey Mackay defined a network as "an organized collection of your personal contacts and your personal contacts' own network" (p.61). He described networks as "geodesic" in shape, with interconnecting links that "can be lateral, vertical or diagonal" (p.60). This section focusses on Stohl's (1995) research of organizational communication, information and explanation of how a network can be geodesic in form, by demonstrating how communication, links, and relationships lay the foundation of a network. Also in this section is a discussion of how the collaborative leadership

model blends with the concept of networks.

Communication

Stohl believed that communication was "collaborative and interdependent" (p.26). Collaborative communication referred to individuals speaking, writing, or using various modes of communication to send and receive information. The interdependency of communication emerged from the necessity of communicating, directly or indirectly, with others. Further to this point, what was communicated was information.

Stohl replaced the term information with the term "message" (p.50), if the receiver of the message derived meaning from the message. Moreover, from Stohl's perspective, how an individual created and interpreted a message was based on the individual's associations, affiliations or allegiances. In other words, the meaning of the message depended on the sender and the type of relationship that existed between the sender and the receiver.

Communication, she summarized, was "the mutual process of interpreting messages and creating understandings" (p.23). Communication combined with the concept of the organization, resulted in a "collective interactive process generating and interpreting messages" (p.23).

Links and Relationships

Stohl used the word "link" to "represent any type of communication contact or [to] symbolize shared interpretations" (p.39). Links assisted individuals to recognize three facets of a relationship. First, they identified functional relationships, such as friendship and status. Links specified the position or relation of one

person with respect to another. Second, they determined the influence exerted on organizational processes and environments; and third, they indicated one's position within an organizational structure. Furthermore, the links helped individuals "make sense" of messages they received "in terms of [the] relationships and identifications with others" (p.75). Moreover, links hinted at the, "status, power, and even the trust people have in us," which help in determining the meaning and the intent of the message (p.75). Stohl pointed out that "a relationship is a connection between two people" (p.80). And relationships comprised of links provided the context, or the body of the links.

Stohl, referring to Knapp (1984), explained that relationships formed in many shapes and sizes:

> the relationship may be mediated or direct, intimate or distant, publicly acknowledged or private. We most often describe relationships in terms of kinship patterns (my brother-in-law, his cousin), degree of intimacy (acquaintance, friend, lover), role relations (boss, co-worker, fellow traveller, and organizational affiliation (classmate, ACLU member). (p.80)

With this in mind, Stohl explained "relational multiplexity," the domain or boundary of a relationship. She illustrated that relationships may be uniplex or multiplex in form.

Uniplex relationships were relationships that "[remained] within one domain," whereas "multiplex" relationships were those that exhibited an "overlap of contents, activities and/or functions in the relationship" (p.83). In other words, a person may have had more than one

designated role within a relationship. Two educators in a school discussing only school-related topics, was one example of a uniplex relationship. Stohl's example of a multiplex relationship was "a co-worker who is also your quality circle leader and a bridge partner" (p.83).

Multiplex relationships promoted relationships that were enduring, dynamic, and intimate (Stohl, 1995). They provided "the individual with richer information than would otherwise be available" (p.83). Tolsdorf (1976), cited in Stohl (1995), pointed out that the relationships formed "critical linkages in social support networks within and outside the organization" (p.83). Such supportive relationships, Albrecht & Adelman (1984) stressed, not only provided empathy, but also facilitated change by helping "the person increase his or her sense of mastery and control over the environment" (cited in Stohl, p.83). This in turn allowed individuals to "share anxiety, concerns, interpretive ambiguities, and pleasures as well as provide individuals links to internal/external resources" (Stohl, p.84).

As multiplex relationships had their advantages, they also had their disadvantages; and Stohl emphasized three of those. The first drawback occurred "when people [became] so closely identified with one another that they [lost] their individuality" (p.84). Consequences of this disadvantage included the discounting of individual achievements and the devaluing of an individual's worth.

The second drawback occurred when the multiplex relationship led to role conflict in which "personal and work lives ... enmeshed and decision-making [crossed] domains"

(p,85). Stohl provided the following example by asking the following question: what would be "the likelihood of blowing the whistle on corporate crime when the culprits are our friends" (p.86).

The third drawback was the realization that multiplex relationships "may also cause as well as alleviate stress" (p.84). Stohl referred to the time and energy expended by an individual in developing and maintaining a multiplex relationship. She suggested that "supportive relationships may have become burdensome as the person is asked to reciprocate support and the 'links become chains'" (p.84). In essence, relationships, with their advantages and drawbacks, were essential components of networks.

Networks

Stohl (1995) described networks as "the tapestry of communicative relationships, a complex, interwoven, symbolic fabric" (p.22), and "an endless series of textured relationships that move and influence one another" (p.22). She elaborated further, pointing out that within an organization, many overlapping networks formed, based on the context of a link, or a relationship.

Networks consisted of "interconnected individuals who are linked by patterned flows of information, influence, and affect both within and across organizational boundaries" (p.18).

A network was a collection of relationships. The relationships identified the position an individual has in relation to another individual. This in turn determined how information flowed from one individual to another individual,

and how information crossed boundaries within various multiplex relationships. For example, a distance education student would communicate with the site facilitator or the mentor, the student would not communicate with the Minister of Education. Relationships determined the boundaries of the network and the communication. Stohl also asserted that boundaries were "always permeable and never stable" (p.26), for the reason that personal, group or "social action [were not] isolated" (p.26).

In summary, Stohl made the point that the relationships individuals entered into identified the individual's personal position within the relationship; assisted the individual in making sense of received messages; and identified other individuals with whom relationships could be established. Reviewing the description MacKay (1990) provided of networks being geodesic in design, Stohl has demonstrated how individuals linked with each other in "lateral, vertical and diagonal" (Mackay, 1990, p.90) ways to create relationships. Multiplex relationships, like those described by Stohl, were also part of the problem-solving and growth activities of collaborative leadership.

Collaborative Leadership

Collaborative leadership, the definition, the criteria for identifying collaboration, the outcomes and the concerns of collaborative leadership are the focus of this section. A description of collaborative leaders is also part of this topic. Included, as well, is a discussion of how distance education portrays the characteristics of collaborative leadership.

In definitions of collaborative leadership, words such as 'groups' and 'common goal' leapt to the foreground. Chrislip and Larson (1994) defined collaborative leadership as "two or more parties who work toward common goals" (p.5). Carlson (1996) defined collaboration within a school context, and cited Shulman's (1989) definition of collaboration: "a collegium...a setting in which individuals come together with a shared vision [p.181]" (p.176). Within the Total Quality Management model, Downey (1994) referred to the twelfth premise of the Quality Fit Framework: mobilizing all workers toward the aims of the system. Here, she described how developing a "team environment" included "working together to accomplish a common mission" (p.93). And in the context of Weisbord's (1992) Future Search Conferences, Schindler-Rainman and Lippitt (1980) defined collaboration as "the cooperative or joint efforts by disparate groups or systems directed to achieving an agreed upon common goal, outcome, or objective" (p.42). The commonalities of all of these definitions were the involvement of people or groups of people and the drive to meet common goals or objectives.

There were also some commonalities in the criteria of collaboration. Chrislip and Larson's criteria for collaborative leadership formed the basis for this discussion.

The first criteria was communication. Chrislip and Larson interpreted this criteria as communication across many lines, whereas Carlson viewed it as communication that was an "informally and formally structured interaction" (p.176). Downey perceived it as access to other members, to other

resources, and to "shared information bases" (p.93). And Schindler-Rainman and Lippitt simply saw it as communicating with everyone.

The second criteria was the provision of training or teaching the necessary skills for individuals involved in a collaborative activity. Downey asserted that all members "must have equal access to training experiences in which they can participate together" (p.94). Schindler-Rainman and Lippitt added the importance of helping people "learn the skills required to develop collaborative networks" (p.40).

"Diverse stakeholders" (Chrislip and Larson, p.40) or "people from all sectors" (Schindler-Rainman and Lippitt, p.40) was the third common criteria. The common characteristic of these individuals was that they had a vested interest in the issues that were to be solved.

Other criteria for collaboration included a shared mission with outcomes that produced "concrete, tangible results" (Chrislip and Larson, p.40), in addition to an environment that identifies and values diversity, promotes mutual respect and equal treatment, and recognizes individual and group successes. Furthermore, other criteria were group strategies pertaining to information input and problem-solving, overcoming significant barriers, such as frustrated stake holders, and developing commitment to the process. Subsequent to the definition of collaborative leadership and the criteria for collaboration, were the outcomes and concerns of collaborative leadership.

Chrislip and Larson listed four outcomes of collaborative leadership. First, problems are solved; second,

"new ways of leading and creating changes are learned" (p.119); third, leaders promote and safeguard the collaborative process; and fourth, individuals are empowered and involved in a collaborative activity. A concern Chrislip and Larson brought forth with respect to collaborative leadership was that sometimes the problem-solving strategies were unclear and this created tension and frustration among the stake holders.

From a school perspective, Carlson quoted Smith and Scott (1990), who observed that collaboration increased "staff harmony [and] mutual respect" (p.176) Also observed by Smith and Scott was "a strong focus on instructional effectiveness" (p.176).

Within the Total Quality Management model, Downey listed the empowerment of workers, the building of interdependent behaviours, the team-member mentality, and the development of personal responsibility and pride of employees as the outcomes of collaborative leadership. Likewise, based on their experiences with Future Search Conferences, Schindler-Rainman and Lippitt noted that Search participants learned new concepts and languages, as well as expanded their competencies.

Bringing about such outcomes required collaborative leaders. Leaders were "catalysts," individuals who had a clear vision, and were "sustained by there deeply democratic belief that people have the capacity to create their own visions and solve their own problems" (Chrislip and Larson, p.146). Richardson (1992), however, viewed the leaders as facilitators. He drew a parallel to Crombie's (1985) analogy

of a soccer umpire. Richardson stated "we're like umpires of a soccer match who, if we become caught up in the play, quickly run backwards out of action, hands above head, indicating a determination not to influence or manipulate" (p.317). A variety of strategies employed by these leaders helped them create, encourage, and maintain a collaborative environment.

Some strategies were involving all stake holders, supporting communication, and providing training in the required skills. Further to this list, Chrislip and Larson added that collaborative leaders demonstrated visible commitment, and shared ownership of the mission or common goal. Also, leaders sustained hope and participated as a leader in all activities. Downey added to the list the leaders who provided facilitation skill training and brought about shared beliefs and values among participants and employees. Time management and establishment of ground rules and processes were what leaders did in Richardson's view.

In summary, collaborative leadership involves individuals as stake holders, who work together, employing various strategies to accomplish mutually agreed-to goals or missions. Collaborative leaders are individuals with a mission who facilitate stakeholder movement to the attainment of the mission, employ strategies that recognize individual uniquenesses, provide individual responsibility and shared ownership. This type of leadership model is applicable to distance education.

In distance education this vision, as an example of the collaborative leadership definition, requires groups of

people, for example students, teacher-mentors, and site facilitators, to work toward common goals, the provision of education to students at a distance, and the successful completion of a distance education course by the student. Collaboration criteria, such as communication and training are also met by distance education. As previously mentioned, individuals in distance education who use audio conferencing, facsimile, E-mail, and video conferencing, ensure that all stake holders receive the same information. Site facilitators perform the duties of training students in the use of the required technological hardware and software needed for the course. The outcomes, or "concrete, tangible results" (Chrislip and Larson, 1994, p.40) are successful course completion by the distance education students, successful use of technology by students, and an increase in the enrolment in future distance education courses. Other outcomes include the empowerment of students, teacher-mentors, and site facilitators when it came to problem-solving activities, and the development of a team-member mentality amongst all stake holders.

In summary, collaborative leadership demanded that all stake holders have a common goal. Collaborative leaders had a vision, they believed that the stake holder could solve their problems, and they performed their leadership role as a facilitator. In distance education, the vision was held by the Ministry of Education, the educational institution, the tutor, the parents, and the student. All of these members acquired the knowledge, skills, and training to solve problems that were of common concern. Site facilitators, as

leaders, supported communication links, provided required information, and demonstrated commitment not only to the process of working toward the common goal but also to the goal itself. Finally, site facilitators, in their role as collaborative leaders, ensured that the required training was available to all stake holders. The leaders, or the site facilitators, in collaborative leadership and in distance education emerged as essential members to the process.

Tutors and Site Facilitators

As integral members in distance education, tutors and site facilitators possess and need special skills and training to perform their roles effectively. This section focusses on the roles, responsibilities, skills and training of tutors and site facilitators.

Tutors

As previously mentioned, the tutor was one of three elements of correspondence education. The other two were the students and the educational institution. The tutor was assigned to the student by the educational institution, according to the course subject being studied. Succinctly stated, a tutor was "a person, or a person supported by artificial intelligence modes and algorithms, who [facilitated] learning by acting as a consultant, helper, arbiter, and reference point for individuals and groups of open and distance learners" (Whiting, 1987, p.32). Tutors assisted students by "ensuring that students [used] the learning materials in the best way; answering questions by telephone, letter, or in infrequent tutorials; extensive record keeping and administration", as well as "marking with

written criticism" (Lewis, 1984, p.24). The tutor's objective, Lewis insisted was "to build the learner's confidence, to help him [sic] become more autonomous" (p.40). Tutors have played, in the past, a role similar to a bridge. They connected the student with the educational institution through the marking and examination of course materials, and the guidance they provide. Over the years, this role has not changed greatly. However, with the progress of computers and the introduction of other technological resources, new skills and training were required, and as a result, the role of site facilitator emerged.

Site Facilitators

Site facilitators worked with distance education students either at a designated school site, at a Distance Education School, or at the home of the distance education student. Lorraine Sherry (1996) described the importance and the role of site facilitators:

> the site facilitator is the extension of the studio teacher. His [sic] responsibilities are to motivate and encourage the remote site students, keep up their enthusiasm, and maintain discipline in the classroom. He is also responsible for smooth running equipment, helping students with interaction, handing out, collection and grading papers, guiding collaborative groups who are working with manipulatives, answering questions when necessary, and assisting the studio teacher when necessary. (p.10)

Willis (1993) reiterated the importance of the site facilitator, asserting that "the facilitator acts as a bridge

between the students and the instructor, keeping informed of student interests and progress" (p.31). Facilitators, Lewis (1984) added "should be considered an important part of the team and a full participant in the teaching and learning process" (p.32).

Tutor and Site Facilitator Skills and Training

Skills common and necessary for tutors and site facilitators were outlined by Davie (1988). The list comprised of good presentation or lecture skills; establishing and communicating an intellectual climate for the course; modelling scholar qualities; supporting and guiding discussion, and commenting constructively on student work, just to name a few. Markowitz's (1990) list added technical and managerial skills, whereas Malan, Rigby and Glines (1991) attached counselling skills.

Mauger and Bouchart (1991) best summarized the training of tutors and site facilitators. They insisted that training incorporate the following skills:

- counselling : to understand and act upon the learner's needs, expectations and goals;
- information : to arrange a learning programme to match the learner's needs;
- organizational : to agree a work schedule with the learner;
- advisory : to assist the learner to obtain and maintain effective learning techniques;
- administrative : to maintain records of learner progress, results and difficulties;
- interpretive : to realize when the learner requires

particular assistance within the learning programme;

- responsive : to communicate effectively with the learner concerning activity and progress;
- motivational : to support and encourage the learner;
- interactive : to conduct workshops and tutorial sessions; [and]
- operational : to act upon feedback from the learner's experience of a programme to contribute towards future amendments in design and/or delivery. (p.8)

Summary

This chapter provided an overview of correspondence education, distance education, and the various means of communication employed in the delivery of distance education. Briefly, the distinction between correspondence education and distance education, was the emergence of a site facilitator in distance education, who provided face-to-face communication with distance education students. Willis (1993) viewed the site facilitator as "a bridge," connecting the student with teacher-mentor. To fulfil the "bridge" role, site facilitators sent information to the students using face-to-face communication, two-way communication and didactic conversations. The modes used to send the information, which also supported the methods of communication, were audio conferencing, E-mail, facsimile, and videoconferencing.

A discussion of Stohl's research on networking demonstrated how site facilitators created links and established relationships which supported the three methods of communication. Adding collaborative leadership to the site

facilitator role, the distance education model and the role of the site facilitator appeared to meet the definitions, the criteria, and the outcomes of collaborative leadership.

Furthermore, an overview of the roles, skills and training of tutors and site facilitators revealed similar expectations for similar reasons. However, one noted difference between tutor roles, skills, and training, and those of site facilitators, was the requirement of working with technology.

There was a wealth of literature that pertained to correspondence tutors, their communication patterns, and their required knowledge and skills. There was a dearth of information pertaining to site facilitators. Furthermore, references listing the roles and responsibilities for correspondence tutors were numerous and repetitive, yet literature describing site facilitator roles and responsibilities was limited. Moreover, very few references in the literature described the roles of site facilitators in high school distance education programs.

Enrolment in distance education programs in British Columbia, has increased over the years. The cause of the increase stemmed from a growing trend among parents who, dissatisfied with public school systems, have decided to home-school their children. Also, high school students desired to progress faster through the education system by using distance education courses to complete courses in their free time. These trends prompted the necessity to define and understand the role of the site facilitator in high school distance education programs.

CHAPTER THREE: METHODOLOGY

Introduction

Qualitative research, as defined by Strauss and Corbin (1990) is "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification. It can refer to research about persons' lives, stories, behaviour, but also about organizational functioning, social movements, or interactional relationships" (p.17). Notably, qualitative research "is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter" (Denzin and Lincoln, 1994, p.2). This type of research uses natural settings, personal experiences, case studies, life stories, and various types of text to "make sense of, or interpret phenomena in terms of the meanings people bring to them" and to "describe routine and problematic moments in individuals' lives" (Denzin and Lincoln, 1994, p.2). Qualitative methodology "provides a framework within which respondents can express their own understandings in their own terms" (Patton, 1987, p. 205).

Participants in this study had the opportunity to express their own understandings of the role of the high school site facilitator by sharing their own unique beliefs, values, experiences, and perspectives.

Research Design

At the time of this study, the New Directions in Distance Learning (NDDL) project was a program that was available to rural and urban high schools throughout the province of British Columbia, Canada. The program provided

courses necessary for high school graduation to registered high school students living in rural, remote, and urban areas of British Columbia. The term 'rural', differentiated from urban, referred to students who were "not in the classroom" (Rollins, 1998, email). This was interpreted as students who registered in courses, but physically did not attend class to complete the courses.

The term "success", defined by a director of the NDDL project, had three criteria: school participation in the NDDL project with minimal technical difficulties, students completing NDDL courses, and students registering in successive NDDL courses. The rationale for defining success was to provide a context for the roles and responsibilities reported by the participants. This study explored the roles and responsibilities of site facilitators working in successful NDDL school sites. The director listed these success criteria during the initial exploration of the research topic.

Students registered in NDDL courses for the following reasons: the school was unable to offer the required courses for graduation, the student failed a course, the student lived in very remote location, or the student cited personal reasons, such as illness, that required extended periods of time absent from school.

Entry to the Population

The Director of the School Programs of the Open Learning Agency in Burnaby, British Columbia, strongly supported this study. To support communication, each participating site facilitator and teacher-mentor had an E-mail account on the

FirstClass server. And the Open School division of the Open Learning Agency provided an E-mail account, also on the FirstClass server, to the researcher for the duration of the study.

During the 1995-1996 academic school year, the researcher participated in the NDDL project as a site facilitator, in a rural high school. Therefore the researcher was able to maintain the communication links with the NDDL project administrators, in addition to having the entree into the site facilitator and teacher-mentor population.

Selection of Subjects

Site facilitators and mentors in the NDDL project, who had a minimum of one year experience, and who had some formal training provided by the NDDL project team, were invited to participate in this study. (See Appendix A). At the time of this study, there were approximately thirty site facilitators and twelve teacher-mentors in the province of British Columbia. Approximately ten site facilitators and teacher-mentors, in total, met these criteria. Six site facilitators and three teacher-mentors volunteered their time to participate in the study.

Protection of Subjects

Beyond the potential of mild fatigue, the study presented no risk to the participants. The focus of this study was an exploration of the roles, responsibilities and daily activities of participants as site facilitators. The identities of the participants were not revealed and data were masked as necessary by giving each participant a pseudonym and providing general descriptions of the NDDL

sites, programs and participants. In addition, the researcher needed to aggregate the data related specifically to site facilitators and teacher-mentors to maintain confidentiality. This ensured that the participants' identities were not inadvertently revealed. The Consent Form indicated that the participants could withdraw from the study at any time. (See Appendix B). Participants in this study also took the opportunity to participate in the telephone interviews away from the work site. Interviews were taped then transcribed, and the audio tapes were locked in a filing cabinet at the researcher's home, then later destroyed after participants verified the data.

Documents such as consent forms, questionnaires, and transcripts were sent via E-mail, through the FirstClass server, to the participants for the reason that E-mail was more secure than sending these documents by facsimile, since facsimile machines at schools were located in a public area that was accessible to anyone in the building. E-mail was addressed to the participants, and to retrieve the documents, participants provided identification and a personal password.

Data Collection

The research data were collected through the use of E-mail questionnaires and telephone interviews.

Questionnaires

Subsequent to receiving consent forms, the researcher sent, via E-mail, demographic questionnaires to the participants. The purpose of the questionnaire was to gather information regarding the site, the distance learning programs in progress at the site, the number of students

enrolled in the New Directions in Distance Learning project (NDDL), and the availability and accessibility of technical assistance. This manner of distribution and collection was chosen because E-mail, in a distance learning environment, is one of the primary means of communication between mentors, site facilitators and students. Questionnaires were returned to the researcher via E-mail, and via fax, within two weeks of mailing. The data was used to refine the interview questions. (See Appendix C).

Interviews

Interviewing, as a qualitative approach, enables people to reflect on an experience in their lives and make sense of it. As Seidman (1991) observes, "it is the process of selecting constitutive details of experience, reflecting on them, giving them order, and thereby making sense of them that makes telling stories a meaning-making experience" (p.1). Patton (1987) states that "interviewing allows the evaluator to enter another person's world, to understand that person's perspective" (p.109). It allows for the participant to "open thoughts, feelings, knowledge and experiences, not only to the interviewer but also to the person answering the questions" (Patton, 1987, p. 140); it is "a way to unlock the internal perspectives of every interviewee" (Patton, 1987, p.141). Merriam,(1988) citing Patton (1970), echoes this observation by stating that "the purpose of the interview is ... to access the perspective of the person being interviewed" (p.73). He further adds that "interviewing is necessary when we can not observe behaviour, feelings, or how people interpret the world around them" (p.72). Since

interviewees were separated by great geographical distances, the researcher conducted interviews by telephone.

Rationale for Telephone Interviews

There were nine Distance Education Schools in British Columbia, each of which served six to fifteen school districts, including a few school districts in two provinces other than British Columbia. With respect to the vast geographical distances and remote locations of school sites, interviewing via telephone was a necessity. Schools participating in the NDDL project were mostly located in remote regions of British Columbia. For example, data from email questionnaires indicated that two participants worked in NDDL school sites 360 kilometers (225 miles) from the nearest urban center.

Borg and Gall (1983) support this method of data collection by specifying the advantages of telephone interviewing:

1. The researcher can select subjects from a much broader accessible population than would be the case if interviewers travelled to the location of each respondent.
2. Since all interviewers can work from a central location, monitoring of interviews and quality control is much easier for the researcher. Automatic data entry and computer-assisted interviewing are also possibilities.
4. In telephone interviewing, when no one answers, little cost is incurred making frequent call backs feasible.

5. Many groups (business people, school superintendents and teachers) are easier to reach by telephone (p.447).

While, Borg and Gall (1983) point out that "research has shown that telephone interviewing reaches nearly the same proportion of the target population, obtains nearly as high a percentage of returns, and produces comparable information" (p.448), Colombotos (1969) adds that "telephone interviews have practical and administrative advantages over face-to-face interviews, particularly if the respondents are scattered over a wide area" (p.782). With respect to the quality of data collected, Rogers (1976) summarizes that "those [interviewees] interviewed in person are somewhat more likely to give socially desirable answers than those interviewed by telephone" (p.53). For example, Hyman (1954) further adds that "if we [sic] remove the 'interviewer' from the physical environment, we [sic] decrease the possibility of respondent involvement with him [the interviewer] as a personality" (p.138). In other words, for this study, since there was no "interviewer effect" during the telephone interviews (Hyman, 1954) because the interviewer was physically removed from the interview, the data collected may have been more honest and authentic.

In keeping with the concept of distance learning, participant interviews were conducted by telephone. Telephone conferencing was the preferred method of interviewing because a large majority of schools did not have the equipment, hardware, software or financing to conduct video conferences. No difficulties were expected since the telephone was another prime mode of communication, and all schools were equipped

with telephone lines and telephones.

Duration and Scheduling of Interviews.

Two sets of interviews were scheduled and conducted with all participants. Upon return of the questionnaires, dates were arranged for the first round of interviews. Prior to the first interview, general interview questions were E-mailed to the participants, in hopes of collecting richer data by allowing the participants the opportunity to reflect upon the questions.

The first set of interviews were held in November 1997, after student registration and school routines had begun. The second set of interviews were held in February 1998. February interviews provided an opportunity for site facilitators and teacher-mentors to reflect upon the completed semester and provide some insight as to what changes they would recommend for the next semester or for the following school year.

Sequence of Interviews.

Both interview sessions were tape recorded. The first interview sessions were approximately thirty-five to forty-five minutes in length. Whereas the second interview sessions lasted ten to twenty minutes. Interview transcripts were E-mailed to the participants for verification. Participants returned the corrected or verified transcript to the researcher using E-mail on the FirstClass server.

In both sets of interviews, participants shared knowledge of the previous year's experiences, which included previous roles and responsibilities, factors that impacted the project, as well as the current year's experiences.

Interview Protocol

Interviews were semi-structured, guided by some open-ended questions to facilitate the data collection. In an effort to reduce interviewer bias and ensure consistency of each interview, each study participant responded to identical questions listed on a prepared interview data collection sheet. (See Appendix D).

Data Analysis

Individual questionnaires were used holistically to help the researcher understand the context of the interview, with respect to the environment in which the participants worked. The first set of interviews were transcribed and coded for the initial themes of roles and responsibilities, skills and training, communication, success and accountability using the interview questions as the base for the coding. Transcripts were also examined for issues requiring further clarification or investigation.

To facilitate the analysis of interviews, the researcher used computer data handling, such as spreadsheets for domain analysis, and word processing for categorization of quotes. Spreadsheets aided in the domain analysis for the semantic relationship of inclusion by listing the verbs found in the *NDDL Learning Guides* and those found in the interview transcripts. Word processing was used to copy quotations from transcripts and paste them to the appropriate interview-question word processing document.

The rationale for the second interview was to clarify and confirm previously collected data. Participants having had time to reflect on the questions from the first

interview, took the opportunity to add to the data they had provided.

Authenticity of Data

The nature of qualitative research demands a different understanding of validity and reliability than as conventionally used in quantitative research.

Qualitative validity may be viewed as "the ethic to remain loyal or true to the phenomena under study" (Altheide and Johnson, 1994, p. 488). Since qualitative research focuses on "meanings and interpretations of members who lived in specific, historical, social and cultural contexts, and faced numerous practical challenges and limitations" (Altheide and Johnson, 1994, p.487), and that these meanings and interpretations are related through language, which is replete with nuances and symbolism, the researcher must present the data within the context it was given. Seidman (1991) asserts:

> by interviewing a number of participants, we can connect their experiences and check the comments of one participant against those of others. Finally, the goal of the process is to understand how our participants understand and make meaning of their experience. If the interview structure works to allow them to make sense to themselves as well as to the interviewer, then it has gone a long way toward validity. (p.17)

Reliability in quantitative research refers to the amount of error in a measurement, or the extent to which a study's findings can be replicated. This view is based on the assumption that "there is a single reality which if studied

repeatedly will give the same results" (Merriam, 1988, p. 170). Merriam (1988) states that achieving reliability in qualitative research is not possible "because what is being studied...is assumed to be in flux, multifaceted, and highly contextual, because information gathered is a function of who gives it and how skilled the researcher is at getting it" (p.171).

However, McMillan (1996) states that reliability in qualitative research is the accuracy of the observations. In other words, "what is recorded as data is what actually occurred in the setting that was studied" (p.251). The use of field notes, tape recordings, video tapes, photographs and quotations, enhance the reliability.

To ensure the authenticity of the data, the researcher conducted "member checks" (Merriam, 1988, p. 169-170). This was accomplished through the review of data at the time of the interview, and again when participants reviewed and corrected the interview transcripts of both interviews.

Summary

The goal of this qualitative study was to examine site facilitators' understandings and perspectives about their roles, responsibilities, and the communication patterns that influenced the New Directions in Distance Learning (NDDL) project at their respective school sites. Data collection included an E-mail questionnaire and two sets of telephone interviews. Data analysis incorporated domain analysis and open coding, using the research questions as the base. Validity and reliability of the data was secured through tape recordings of the telephone interviews and transcript

verification completed by participants.

CHAPTER FOUR: FINDINGS OF THE STUDY

This chapter sorts the collected data into five categories: contextual information, responses to the research questions, definitions of successful New Directions in Distance Learning (NDDL) project school sites, suggestions and improvements for NDDL school sites, and accountability of NDDL site facilitators.

Contextual Information

The information presented in this section provides descriptions of the participants, the school sites with respect to location, the two different types of distance education students, and the distance education programs offered at the school sites. Furthermore, views of what constitutes a successful NDDL school site is also presented.

Study Participants

A total of nine site facilitators and teacher-mentors, working in eight NDDL project school sites, participated in the study. Teacher-mentors were the course subject specialists who taught the NDDL students, and the site facilitators provided the on-site assistance to the students. In accordance with the terms of the Consent Form, pseudonyms were given for the three mentors, Sarah, Wilma, and Yvette, and the six site facilitators, Dean, Eddie, Frank, Trisha, Verna, and Zoe. Descriptions of NDDL sites, programs and participants were general to preserve the identity of participants.

Participants in this study worked at all levels within the educational field, from teachers to administrators. Based

on their years of experience as active members in the NDDL project, the participants averaged three years of experience with the NDDL project. Some of the participants were site facilitators and teacher-mentors concurrently. The majority of the participants were employed full-time in regular schools, Distance Education Schools or in Continuing Education Centers.

Involvement in the NDDL project appeared to be based on the individual's interest in distance education, as well as some prior experience either with distance education or with the NDDL project. The majority of the participants, six out of nine, were 'asked' to participate. Of the remaining three participants, one accepted the position to fulfil the teaching requirement of his current position, another participant assumed the site facilitator responsibilities for another site facilitator for one year, and the third participant stated that the site facilitator role and responsibilities were "a natural progression ...[a] natural part of my job" (Eddie). The natural progression Eddie referred to was the transition from his site facilitator position in a rural school to a site facilitator position in a Distance Education School. He stated that the Open Learning Agency wanted to expand the NDDL project in his geographical area and he was "the guy" for the site facilitator position that emerged from the expansion.

The training the participants received for the position of site facilitator included the "annual camps" (Wilma), either at the Open Learning Agency in Burnaby, British Columbia, or at Silver Star in Vernon, British Columbia, or

at both. Two participants "learned by pioneering" (Yvette) or participated in "online sessions to learn Applemedia and Whiteboard [and] conferencing tools" (Verna). The NDDL project provides annual training sessions to teacher-mentors and site facilitators, during the summer months.

All participants agreed that the time dedicated to site facilitation varied, according to "the student's needs" (Trisha) and the site facilitator's needs. For example, to troubleshoot and to understand how the technology worked, Dean required approximately one hour per week; Charles dedicated three hours per week, whereas Eddie exacted four to six hours per week. Sarah, Trisha, and Wilma, all felt time was variable, "...sometimes 4 hours/week other weeks nothing" (Wilma). Zoe sometimes needed "up to 8 hours to do everything" she felt she must do.

In summary, the participants of this study held positions ranging from teachers to administrators. Their participation in the NDDL project came about by either personal requests to participate from school administration or NDDL administration, by stepping into an existing position, or by natural progression from a previously held position. The requests for participation were based on the participants' prior experiences with distance education or with the NDDL project. There was no reference made to a selection process for the position of site facilitator at this time.

NDDL School Sites.

Of the eight NDDL school sites, five were located in urban centers and the remaining three were located in rural

communities in which the distance to an urban center was as close as twenty kilometres (12.5 miles) or as far as 400 kilometres (250 miles).

To further facilitate the comprehension of the research data, the term 'rural' required clarification. Gail Moseley, President of the British Columbia Rural Teachers' Association offered the following explanation of 'rural'. She explained that "often rural means multigrade classrooms. It means fewer people on staff, therefore less opportunity to network with colleagues. The high school ... is too small to offer the variety of courses or timetabling options that an urban or larger school could" (1998, email). NDDL project administration defined 'rural' simply as "students that are at a distance, ie: not in the classroom" (Rollins, 1998, email). The NDDL project offered to students, particularly those not in a classroom, the opportunity to complete courses not offered by their schools. All of the school sites in this study offered regular correspondence courses and NDDL courses.

Distance Education Students

Students registered in correspondence or in NDDL courses fell into two general categories: school-based and home-based.

School-based students registered in a school, with enrolment occurring in September and finishing in June. Home-based students were "a completely different kettle of fish" said Zoe. "They can start anytime; ... from September all the way to about February." She added "they're not time tabled in any way... [and they] don't want to come in to a site; they

want to be able to do everything from home."

Correspondence courses

Distance Education Schools, in British Columbia, provided correspondence education to students within a specified area that may consist of nine to fifteen different school districts. (see Appendix E). Each Distance Education School was responsible for student registration, distribution of resources, marking assignments, and assigning course grades.

Based on the survey data from the participants, approximately nine thousand students, from kindergarten to grade twelve, registered in correspondence courses. The reason this number was so high was that the majority of the study sites were Distance Education Schools or Continuing Education Centers that registered school-based students, in addition to home-based students.

The reason most often recorded on the questionnaire, six out of nine participants, for students registering in a correspondence course was that a required course was not offered at the school. There were several other reasons why students registered in correspondence courses: the students did not comply with public school rules and regulations, or the students did not meet with academic success in the public school system. (See Appendix F for additional reasons). Study participants listed similar reasons for student registration in New Directions in Distance Learning project courses.

The New Directions in Distance Learning Project

The New Directions in Distance Learning (NDDL) project offered to distance education students a technological

environment and a course mentor to aid their completion of distance education courses.

The school sites in this study offered twenty-seven different NDDL courses in grades ten to twelve. Course topics, for example, included Environmental Studies 11, Information Technology 11, Entrepreneurship 12, and First Nations 12. (See Appendix G for courses and enrolment).

Nearly all of the survey data indicated that the two most prevalent reasons for registering in NDDL courses were "[the] course [was] not offered at school" or the student was "looking for an alternative to traditional correspondence." (See Appendix H for additional reasons)

Site technology.

With respect to technology, all sites used the FirstClass server and ClarisWorks software. The NDDL project provided the FirstClass software to school sites and home-based students. Whereas, the school, the school district, or the home-based student purchased the ClarisWorks software.

Sites varied in the use of Macintosh, IBM or IBM compatible computers, and graphic tablets. There was also a variety in the use of software applications such as Netscape, Microsoft Explorer, Timbuktu Pro, Whiteboard and Windows 95, in addition to other resources which included ploycoms, televisions, video cassette recorders, telephones, and printers. Each site selected the desired computer system and accessories. Yet, common to all sites was the Paperport scanner. Complications and increased troubleshooting occurred with home-based students, for example, who must provide their own equipment. They frequently ran into incompatibility

problems with hardware and software.

Incompatibility was one of the problems experienced at NDDL sites by site facilitators. Sarah illustrated this problem by providing the example of "students using Claris 4 [ClarisWorks 4.0] instead of Claris 3 [ClarisWorks 3.0]." And when there were "problems brought on through operator error," Eddie explained, the site facilitator was "troubleshooting it over the phone."

Problems with connectivity, "how well two hardware or software systems work together" (Computing Dictionary, 1997, p.81) were concerns at five out of eight sites. "Maintaining a connection to remote sites when using the Whiteboard application" (Wilma) was one example of this type of problem. Other technical problems included "sites signing on without the necessary hardware," (Sarah) "the server going down at [the] site," (Zoe) and "configuring Windows computers to run NDDL software" (Eddie). When such technical or technological problems occurred and a technician was required, the availability of the technician varied greatly from site to site. For example, Frank and Trisha were their own technical support or had "personal contact" with someone who readily provided the technical expertise. Three participants, Yvette, Zoe and Eddie, also stated that they had a technician, as Yvette put it, "available...when I call." However, with the amalgamation of school districts, two participants found that the technicians were "not very accessible."

There was some consistency, however, in the repair time of software and hardware problems, when a technician was available. Onsite problems were either "fixed immediately,"

(Verna) or fixed "within 24 hours" (Yvette). Sarah's problems with connectivity required "up to 2-3 days" to correct. Computer repair requiring the computer to be sent to an off-site technician, necessitated "up to 3 weeks" for repair work (Verna).

Views of Success

The purpose of this study was to understand the roles and responsibilities of site facilitators working in successful NDDL sites. Therefore it was important to define success from the perspectives of the NDDL project administration and from the participants. From their perspective, the assumption was that if site facilitators performed their roles and responsibilities, then the NDDL school site would be successful. The same is true for the reverse scenario: if the site was successful, then site facilitators executed their roles and responsibilities. Study participants' view of success provided some insight of the goals they strived to achieve.

Success, defined by an NDDL administrator, consisted of three criteria: school participating in the project with minimal technical difficulties; students completing NDDL courses; and students returning to the NDDL project to complete successive courses.

Study participants expressed their views of success during the first telephone interview. Sarah generalized success as having "all of the pieces in place as early as possible" and overcoming "the frustrations or dealing with why that is a frustration in the beginning." The "pieces" that Sarah referred to included success in the areas of

technology, participation of site facilitators and teacher-mentors, family support, and student responsibilities, and student responses.

Technology

Three participants supported the first criterion of the NDDL administration's definition of success, minimal technical difficulties. Zoe stated that success meant the "equipment is there and works" and the "connections are in place." Furthermore, Sarah pointed out that the "communication link is open." Verna perceived minimal technical difficulties from the perspective of the distance education students who use the equipment on a daily basis. She defined success as students' ability "to run technical stuff [software. Furthermore, the students] are well trained on the equipment."

Study participants also confirmed the remaining two criteria of success outlined by the NDDL administration: students completing courses and students returning for successive courses. For example, Frank boasted that a "high proportion of students [completed] courses." Also, Trisha and Verna noted an increasing number of students inquiring if they could take a course in the NDDL format.

Site Facilitator and Mentor Participation

Zoe and Sarah identified three criteria for successful sites: the site facilitator was present, the site facilitator encouraged "discussion in the forum," and the site facilitator always kept "in touch on a daily basis with other messages" (Sarah). Furthermore, Eddie felt that success was a "good flow of communication between the student and the

mentor." The participants interpreted this comment to mean teacher-mentor communication with distance education students was in the form of "[getting] back to them [the students] quickly on papers marked and questions asked."

Family Support

Eddie emphasized the importance of family support. He insisted that the family needed to be "a source of support at home: motivating them [the students], [in addition to spending] the money to buy the computers, the phone line, the scanner and all the rest...."

Student Responsibilities

Study participants added student responsibilities and student responses to the NDDL project and its activities at the school sites as indicators of success.

Success indicators of student responsibilities that the students accepted and fulfilled included "being at audio-conferences [and] checking email," (Wilma) "[understanding] their responsibilities," and "[modelling] these responsibilities] for the rest of the school" (Frank). In addition, there were a "high proportion of students ... completing courses" (Frank).

Sarah and Frank summarized the concept of success of a school site, from a site facilitator's perspective. Sarah described it as "a site taking advantage of all that NDDL has to offer." Frank believed that successful sites provided "different opportunities for students [and generated] a community of learners that has an identity to themselves."

Student Responses.

Interview data indicated that one of the participants

considered student responses as a strong indicator of success. An NDDL site was successful if the students' responses to the project and to the courses were enthusiastic. At successful sites, "students [loved] to go to the site" (Yvette). Moreover, "students [enjoyed] the relationship with the facilitator and the mentor" (Yvette). The question now arises: what do site facilitators do that makes an NDDL site successful.

Site Facilitator Roles

Further presentation of data is sorted according to the role of the participants. Participants who worked primarily as teacher-mentors are referred to as study mentors, and participants who worked primarily as site facilitators are referred to as study site facilitators. The term site facilitator refers to site facilitators in general, as a collective.

Successful Sites

During the second interview, participants responded to the question 'do you have a successful site?'

The data indicated that all participants had successful sites. In addition to the three success criteria listed by the NDDL administration, and the five criteria listed by the participants during the first interview, three new criteria emerged as success indicators. In addition to the technological resources being in place and running, the first additional indicator of a successful site was a designated room to in the school for the NDDL technological resources and the NDDL students. The second additional indicator outlined the students' abilities to "work very independently

on [the courses], rarely [needing] any assistance" (Sarah). The third additional indicator referred to the manner in which the NDDL project was used by the school. For example, the school offered NDDL courses to students for the reason that Distance Education School staff or the regular school staff did not "have the expertise to deliver [all the courses]" (Dean) or the school did not offer the courses.

In brief, when asked to define successful sites, participants readily listed criteria matching those identified by the NDDL project administration. Interestingly, when asked if their own sites were successful, participants added, to the success indicators from the first interview, a designated room for NDDL equipment and NDDL students, students working with minimal assistance, and student registrations in NDDL courses when direct, onsite instruction was unavailable.

In summary, a successful NDDL school site met the following criteria: sites participating in the NDDL project with minimal technical difficulties, students completing NDDL courses, students registering in successive NDDL courses, site facilitators and teacher-mentors actively participating, families supporting the students, students accepting their share of responsibilities, students responding enthusiastically to the project, students using the technology competently, and the school designating a room for the NDDL students and equipment.

Research Question #1:

What are the roles and responsibilities of site facilitators in successful New Directions in Distance Learning project

school sites?

The NDDL project developed the *NDDL Learning Guides* which provided descriptions of roles, responsibilities, and expectations of teacher-mentors, site facilitators, and NDDL students in accordance to a modified definition of the term 'facilitate.' Facilitate, according to the Random House Webster's College Dictionary, was "to make easier or less difficult" (1997, p.466). The NDDL project administration modified this definition, as well as the term facilitator. Facilitate meant "to make more successful" (*NDDL Learning Guides*, 1997, p.25).

Initial analysis of data related to research question one began with an examination of the verbs participants used to describe their roles and responsibilities compared with the list of verbs written in the *NDDL Learning Guides*. Three categories of verbs emerged. The first category contained verbs that were common to both the *NDDL Learning Guides* and the participants' responses. This list included verbs such as "maintain," "motivate," and "problem-solve." These verbs appeared to be work-related expectations, rather than specific activities to be executed. (p.26)

The second category contained verbs found in the *NDDL Learning Guides*, but not mentioned by the participants. Some of these verbs were "counsel," "evaluate," and "celebrate" (p.27). This list appeared to offer suggestions or strategies for achieving the expectations from the first category of verbs.

The third category yielded a list of verbs unique to the participants. In other words, these were the activities site

facilitators executed at their respective school sites. Some of the verbs showed administrative support, such as "register," "photocopy" and "ship." Other verbs indicated support activities to the teacher-mentors, such as "invigilate", "check," and "support."

Another group of verbs that suggested activities unique to the site facilitator role contained verbs like "advocate," "mediate," "intercede," and "negotiate" which conveyed the impression that site facilitators did more than answer questions and keep site technology working. (See Appendix J for Verb List)

In summary, it seemed that the verbs common to both the *NDDL Learning Guides* and the participants were verbs used to indicate general expectations of site facilitators. The verbs found only in the *NDDL Learning Guides* appeared to be strategies to aid the site facilitator in meeting NDDL expectations. Finally, the participants' list of verbs reflected the activities unique to site facilitators.

Upon closer examination of the verbs used by participants, seven categories of roles and responsibilities emerged: technology, communication, instruction and motivation, problem-solving, regulations, progress, and other roles and responsibilities.

Technology

Study participants defined roles and responsibilities related to technology in terms of preparation and hands-on training. Summarized, the participants stated that the site facilitator's duties were to "ensure that all of the technological resources are available and in working

condition" (Dean), and to "[set] up students on their technology [by providing] software and FirstClass server accounts; [by getting] them wired up for FirstClass, and [providing] a list of requirements [hardware and software] for NDDL to families" (Eddie).

Communication

From the study mentors' point of view, site facilitators established and maintained communication with mentors by checking into online forums, looking into the FirstClass staff room, and "[checking] their own email and [responding] to it" (Yvette). Wilma pointed out that in addition to teacher-mentors, maintaining "contact with ... students" was also important.

Study site facilitators defined communication as the "contact between the mentor and the school and the student" (Zoe, Verna). In addition to the staff room and the various forums on the FirstClass server, site facilitators also communicated with mentors by "[sitting] in on all audio conferences" (Trisha, Verna).

Communication with school members included individuals such as principals, counsellors, and members of the staff. Regarding students, Zoe insisted the site facilitator was the first to "initiate contact with the students". This usually occurred during course registration or dissemination of NDDL course materials.

Once contact was established, communication duties, at this stage, included "answering inquiries from parents and students, and "pass[ing] on messages," to mentors (Zoe).

Interestingly, a common role and responsibility emerged

from participants' responses, "working as a liaison" or "working on the student's behalf" as an "advocate" (Sarah). From a mentor's perspective, Sarah described two instances when site facilitators were required to assume advocate roles: when "a student is not getting feedback from a mentor" (Sarah), or "if they're [students] having problems with the course or their mentor". Frank explained that in such instances, as a site facilitator, he " will intercede on their behalf." And Zoe did "a little bit of negotiation" during a problem-solving situation in which "there's been a deadline posted and the student [wanted] to know if something would be accepted late." She made the point that as a site facilitator she had "a perspective that the mentor might not [have had]" or knew "some of the personal circumstances for the student." She was therefore able to "kind of mediate...when the student [was] unable to get that across."

The student advocate role was a means by which the site facilitator performed the function of mediator and negotiator between the mentor and the student when problems arose with respect to assignments, tests, and personal circumstances, such as illness or family-related problems.

Instruction and Motivation

In addition to the role of student advocate, site facilitators also taught and motivated the distance education students. The teaching aspect, from the study mentor's perspective, meant "working with students," (Yvette) "[teaching] time management, "keeping the frustration level down" and "[helping] students be comfortable in a technological environment" (Sarah). Wilma described a site

facilitator as a "motivator" and a "pusher." And Yvette viewed the site facilitator as a person who "gets along well with students [in an almost] counselling type relationship."

Study site facilitators interpreted teaching as orienting students to the NDDL project, and "[teaching students] how to use the technology" (Frank).

When referring to motivation, participants used the term 'encourage.' Study mentors perceived 'encourage' as "[encouraging] students to try ... things," (Yvette) or "[encouraging] them to use the technology" (Sarah). Study site facilitators understood the term 'encourage' to mean "[encouraging] them to set deadlines," (Frank) or encouraging students "to contact the mentor" (Verna and Trisha). In terms of keeping the frustration level down, site facilitators accomplished this, according to Dean, Sarah, and Verna by "assisting with [course] materials." For example, "[helping] them with the actual course material" (Verna).

In short, the goal of instruction and motivation was to "empower the learner to be a learner" (Trisha and Verna).

Problem-Solving

Problem-solving, mentioned by two participants, Sarah, a mentor, and Zoe, a site facilitator, was an on-going daily activity, whether it was determining how to E-mail six separate documents as one document, or advocating on behalf of a student with a mentor regarding an assignment. The term problem-solving occurred in every category; however, problem-solving emerged as a specific responsibility of site facilitators.

Regulations

Regulations, defined by the researcher, were roles and responsibilities that appeared to be administrative in nature, similar to the roles and responsibilities listed in the *NDDL Learning Guides*. Cited by the study mentors, site facilitators responsibilities included sending tests to the mentors, obtaining the final course grade from mentors, and ensuring that a course completion certificate was issued to the student.

Site facilitators, in terms of regulations, were recruiting and registering students, monitoring tests, and finding resources.

Progress

From a mentor's perspective, the site facilitator's responsibilities, pertaining to progress, were to "help students plan their time," (Sarah) as well as to "keep track of their progress" (Wilma). The study site facilitators viewed their responsibilities as facilitating the student's "smooth movement through the course," (Dean) "[making] students aware of their timeline," (Sarah, Eddie, Frank) and "[tracking] down students when they disappear" (Zoe).

Other Roles and Responsibilities

The last category accommodated the roles and responsibilities that did not fit under any of the above categories. For example, Zoe stated that one of her roles as a site facilitator was "presenting NDDL project in a positive light" as well as "presenting it [NDDL project] as a new alternative, and as a viable alternative [of education] that some students might really enjoy to be a part of."

A responsibility Zoe accepted at her site was "to make house calls ... when a student is having trouble getting their FirstClass [server] set up."

Frank mentioned that "for the kids that [were] having trouble in a particular area," he "[advocated] for them ... by trying to set up some external tutoring or something of that nature." Verna went so far as to "become a co-learner" with a student in a particular subject. Her reason was so she was "there as the onsite person to help [the student]."

Going Above and Beyond

In response to the question "do you ever go above and beyond what is stated or what is expected," participants spoke of incidences when they performed roles and responsibilities above or beyond stated responsibilities or expectations of site facilitators. The purpose of asking this question was to determine if site facilitators performed any roles or responsibilities outside the ones outlined by the NDDL project administration. The overwhelming response was "you do what it takes" (Dean). This attitude was so ingrained within the roles and responsibilities performed by the participants, that some of them, both mentors and site facilitators, were unable to identify what some of these "above and beyond" roles and responsibilities would be. For example, one response to the question was "as most teachers do, they advocate for their students ... so I guess I'm not really clear on what those duties are" (Frank). Sarah succinctly summarized participants views on this topic. She stated simply that 'doing what it takes' was "part of the duties."

And yet Sarah described her role in the triad, at her site, as "nebulous" for the reason that once the communication was established between the student and the mentor, the role of the site facilitator was relatively small. Furthermore, she stated that she carried out activities above and beyond the expectations of a site facilitator. She became what she termed a "touch" person at the Distance Education School. She elaborated "I'm going over to [other] schools... [to] try and market the program, as well as operating as a site facilitator, registering students and so on ... monitoring their progress."

In summary, Trisha and Verna summarized the roles and responsibilities of site facilitators. Site facilitators were "everything from a babysitter to a mentor, to counsellor to teacher." Each one of above roles and responsibilities required skills and training.

Required Site Facilitator Skills

The required skills listed by participants fell into six categories: technology, communication, problem-solving, knowledge, individual skills, and other skills.

An important skill required by site facilitators was the ability to work with technology. From a mentor's perspective, Yvette believed that site facilitators should be "comfortable with using whatever kind of computer they have on site." Furthermore, they should be "familiar [with] and successfully using ClarisWorks, Paperport," in addition to "...being a bit of a troubleshooter with computers." This last comment resonated with Wilma, who asserted that site facilitators "need to know the ins and outs of all the pieces of equipment

they need to use."

From a site facilitator's view, Eddie summarized the technical skills required by site facilitators:

> you've got to be the one to fix the problems very quickly, whatever it happens to be, so in a school, you need to very familiar with a network, and how to connect to it, and the software required and you know how this works and that works.

Communication, in its various forms, was another necessary skill required by site facilitators, particularly interpersonal communication. For example, Dean viewed communication skills as a vehicle for "providing encouragement ... [checking] with the student about their perception about their progress, [and making] sure the student is feeling good about what they're doing."

Problem-solving skills were needed, Zoe stated, because "you [site facilitator] have to be able to cope with ... frustrations and get past them, and be able to handle the stuff so the students don't have that on their backs." Sarah qualified Zoe's statement:

> it's the ... problem-solving, the not-panicking; it's ... how do I help the student solve the problem instead of worrying about where the cause of the problem is. [You] have to separate that out, because the student doesn't need to get involved with that.

Participants directly linked problem-solving with the requirement of being knowledgeable, not only pertaining to technology, but also to course materials.

Three participants, Trisha, Eddie and Verna, commented

that "a broad range of knowledge," or knowledge of "broad curriculum [sic] at the secondary level is another necessary skill" (Eddie). Trisha expanded on this skill:

> you have to see yourself as a co-learner ... there's enough changes in the technology and being able to facilitate, so many different courses, and if you're not interested in the subject matter yourself and getting up to speed and that, you'd be deadly in this.

The researcher interpreted the phrase "You'd be deadly in this" to mean that if the site facilitator did not have some knowledge related to the course subject, then the site facilitator would be unable to assist the student in course work.

Also mentioned were some of the individual, or personal skills participants felt site facilitators required. The study mentors felt site facilitators required "a sense of humour," (Wilma) and "flexibility" (Yvette). Yvette also pointed out that "good site facilitators [made] sure the problems [were] solved."

In contrast, the study site facilitators listed "patience; resilience," (Trisha) "commitment...and...energy" (Zoe) as required individual skills.

Other skills mentioned by participants were time management, understanding the NDDL concept and gaining respect. Four participants, three site facilitators and a mentor, mentioned time management as a required skill for the purpose of "keeping students organized" (Eddie); "ensuring that the resources ... to do the activities are available" (Dean); and "helping students to plan their time so that they

make the most effective use of their time" (Sarah).

Study site facilitators mentioned a few skills, not mentioned by study mentors. Zoe, for example, felt it was important to have "an understanding of the concept of NDDL, what it's trying to accomplish in terms of how the learning is going to occur." And Frank felt that gaining "respect from the people that you're working with" was important because "you need a decent space and you need a certain amount of equipment. And allocation of resources."

Eddie offered an insight to the skill that required site facilitators "to get past some of the ... reservations" students exhibited when working in the NDDL environment. He noticed that students were reluctant to work with the new NDDL technology because they feared they would appear "really stupid" or they would be embarrassed when they made mistakes. For this reason, Eddie felt it was important for site facilitators to have the skills to make students feel comfortable in the NDDL environment.

All participants gave data highlighting required skills in communication, technology, and problem-solving. A broad base of knowledge, accompanied by commitment and persistence were also listed as required skills. Competency in the above skills required training.

Required Site Facilitator Training

At the time of this study, the NDDL project administration provided training to mentors and site facilitators during summer months at either the Open Learning Agency, in Burnaby, British Columbia, or at the Silver Star resort in Vernon, British Columbia. The researcher

categorized the data related to skills and training into the following topics: technology, communication, site facilitation, and NDDL structure and regulations.

Technology

In terms of technology, Zoe stated that the site facilitator required training in "the essential technical background of the software and hardware that's being used for the project." She elaborated "they [the site facilitators] don't have to be an expert on it all, but need to know how it works ... you really need to be good with FirstClass." Sarah corroborated Zoe's statement and referred to an incident in which a mentor sent a message to a student requesting several separate files to be submitted and E-mailed to the mentor as one file. The mentor also referred the student to Sarah for instructions. Sarah laughed, "I went 'Ahhhh, how do I do this?" She underscored the importance of technological knowledge and application of computer hardware and software. Dean, as a site facilitator, felt that the training should bring a site facilitator to the point where they are "able to maintain whatever the current technology is ... and certainly expert to the point where they understand what's gone wrong." Eddie described the technology training required by site facilitators working with home-based or home-schooled students:

> technically, you [the site facilitator] need to have a broad base of knowledge of computers, communications with computers; different platforms when people provide their own hardware. You need to work with Windows 3.1, Windows 95, Mac systems. You need to work with dial-in

accounts ... using flatbed scanner and vision software [and] be able to make a file that is readable by the mentor.

In short, technology training included knowledge and application of computer hardware and software used at the school site, as well as some training in problem-solving or troubleshooting.

Communication

Communication training, Sarah firmly believed, not only included the development of interpersonal skills, but also the development of "mediation skills." She elaborated, "I think they [site facilitators] need some mediation skills, so that they feel comfortable acting as a student advocate, and doing it in a respectful way." Dean commented that training included "the ability to develop and maintain a good relationship, so [that] they're [the triad] working effectively and efficiently."

Eddie perceived a need for site facilitators to learn how "to communicate ... with some ... personality... as a human being over the phone lines, or via computer, [and] getting some life into it. [Being] an effective communicator over inanimate phone lines and trying to get some kind of relationship established is an important thing."

In short, interpersonal communication skills were important and necessary skills for site facilitators. Study mentors felt it important for future training of site facilitators to include training in mediation skills. One study site facilitator felt it was important to train site facilitators on how to 'come across' as a human being over

the phone lines.

Site Facilitation

Study participants, who were site facilitators, spoke with conviction about facilitation training. Facilitation training, in Frank's view, consisted of "some basic plans in how to run your program as a facilitator: how to recruit kids, how to encourage them to be successful, strategies that work, strategies that don't work." He added a last minute thought, "how to develop a community of learners, like developing some character in this little group." Likewise, Trisha believed that facilitation training needed "to be directed at 'how to be a facilitator'." She reasoned that "we're at a stage where facilitative learning and this kind of delivery model has to be taught." Verna made the point that facilitation "could be learned."

Verna indicated that the skill of facilitation begins with the acceptance of "the theory of self-paced learning which is putting the onus on the learner to have an active role in their learning, be an active participant in it" (Verna). She pointed out that self-paced learning "immediately switches...from direct instruction, where it it's all teacher driven. ... [to] how do you take charge of your learning and advocate for yourself."

Dean mentioned the word "caring" when he defined the facilitative training concept. He felt that site facilitators needed "to be caring people," for the reason that "one of the most important considerations in any kind of learning environment is for the learner to build a connection with, not only with the learning, but with the mentor-facilitator

pair."

Facilitation training, in summary, consisted of learning the processes involved in running the NDDL project at the school site. Participants, particularly the site facilitators, felt that it was possible to learn how to be a site facilitator.

NDDL structure and regulations

Another training topic mentioned by two participants was learning and understanding the organizational structure and the regulations of the NDDL project.

Study participants felt it was important to have a sound understanding of the NDDL organizational structure and its policies and procedures. As a site facilitator, Eddie made the point that "having a really good picture of NDDL [and of] the structure of NDDL [was important], so you know all the different components and the things that [were] supposed to happen when and where."

From a mentor's point of view, Yvette stressed the importance of "knowing NDDL policy." She described a common occurrence when students wrote NDDL course tests. Policy, in the *NDDL Learning Guides*, stipulated that the site facilitator was to monitor the test, then send it to the mentor. In many instances, "facilitators just have the kids send [the test] directly to [the mentor]." When policies were not observed, all participants expressed frustration for the reason that activities or events that were expected, either did not occur or occurred in an unexpected manner.

In brief, participants emphasized the need for skills and training in technology and communication. Facilitation

training developed the skills of problem-solving and administering NDDL policies and procedures. Also, participants affirmed that the development of skills unique to each individual site facilitator such as humour, persistence, commitment, flexibility, patience, and resiliency, developed with practice and with time.

Research Questions #2:
Who do site facilitators communicate with within their school sites to ensure the success of the New Directions in Distance Learning project at the school site?

Within the working environment, participants, both mentors and site facilitators, felt it was important for site facilitators to communicate with the school principal and the school staff. Study mentors felt that the principal had "a lot to do with budgeting [and] deciding what programs are running," as well as getting "in touch with all the big wigs [school district administrators, school board members]" (Yvette) for necessary program resources.

Study site facilitators viewed communication with school principals important because the school principal provided information on issues such as "how the project is expanding" (Zoe), in addition to "the resources...the time...[and the] training" (Eddie).

Equally important and receiving recognition were school support staff and teaching staff, working in the Distance Education Schools and the regular schools. The data suggested that site facilitators favoured a team-approach, working with individuals who were connected to the NDDL project school

site in some way. For example, Dean stated he worked "with every member of [his] staff, clerical staff included." Therefore, they all bore "some responsibility for facilitating." He clarified his statement with this example:

> If Bob [student] comes in and he's working on a creative writing course, and I as a mentor don't happen to be there when he comes in, that there is somebody that knows that he is taking the course, where the resources are, how things work ... and to provide him with assistance.

As a mentor, Sarah confirmed that, in her school, the staff were "fairly comfortable with technology," and assisted were necessary. She concluded "it's never entirely on one person's shoulder." Yvette saw another need to communicate with regular school staff. She felt that the school staff needed "to understand what it is the facilitator is doing." She elaborated, referring to her own experiences:

> I found that when I first started doing computer stuff, the rest of my staff sort of acted as if I was out on the moon someplace, and really weird. And others [thought] that I was getting such a break, and why did I get it and they didn't. And I think they need to know ... when I'm going home, I'm not going home to play, I'm working. I may be playing when the sun's shining, but then I'm going to put in five hours at night.

Other individuals, study site facilitators communicated with, included students and their parents, school counsellors, NDDL administration, and mentors.

In short, the study mentors communicated with school

principals and school staff to ensure that distance education students received instruction, assistance and resources. The data gathered from the participants appeared to support the concept of team work in their working environments. In addition to the school principal and staff, study site facilitators dialogued with individuals who required the site facilitator's knowledge and assistance related to the NDDL project. Such individuals were, for example, parents, students, and teachers interested in the NDDL project.

One final note, two participants stated that they spoke with other site facilitators, and only one participant, Wilma, stated that in her role as a site facilitator, she did not "interact with anybody regarding that project apart from the students themselves."

Research Question #3:

Who do site facilitators communicate with outside of their working environment to ensure the success of the New Directions in Distance Learning project at the school site?

Outside of their working environments, all participants, whether mentor or site facilitator, stated that communication flowed between site facilitators and the NDDL project administration. As Eddie stated, "OLA [Open Learning Agency] is a big player." Study mentors communicated with the project coordinator, the online administrator, and other mentors and site facilitators. The study site facilitators communicated with, in addition to the individuals mentioned by the study mentors, Leva Lee, a coordinator at the Open School, interested parents, students, and educators, and technical support staff.

One participant, Eddie, stated that he had spoken with BC Telephones on the occasions when the school established a network or when a student was "having a problem getting a second line."

In summary, the majority of the information flowed, internally and externally of the site facilitator's working environment, between the site facilitators, the school administrators, the school staff at both the Distance Education Schools and the regular schools, and the NDDL project administration.

Maintaining Communication

When asked 'who should maintain the communication to ensure the success of the NDDL project,' all participants agreed that the responsibility devolved on "all three [triad members], mentor, site facilitator, and students" (Yvette). Frank explained that "if each person in that triad continues to work at it, it can be very successful." Eddie underscored the role of the site facilitator. He confirmed that "the facilitator is the one that has to get that flow going, to start with; introducing the student to the mentor, talking to OLA [Open Learning Agency] about accounts, fixing dial-in problems, fixing account problems, checking passwords."

In short, the three groups of individuals that site facilitators communicated with the most, internally and externally, were the school administrators, the school staff, and the NDDL project administration. The responsibility of sustaining communication, to ensure the success of the NDDL project site, fell to the triad members. The site facilitator, from a study site facilitator's perspective,

also had the responsibility to establish and perform various tasks that sustained the communication links.

Research Question #4:
What relationships are created and maintained by site facilitators?

The fourth research question focussed on the relationships site facilitators established and maintained to ensure the success of the NDDL project at the school site. Within the triad learning model, relationships formed between all triad members, the site facilitator, the mentor, and the student. Wilma stressed, from a mentor's perspective, the importance of a site facilitator-mentor relationship:

> With distance ed. [sic] students working from home, the communication is very much strictly between the mentor and the student. And there is very little information that comes through to the site facilitator. So it is really important ... to have a working relationship with the mentors of each ... [student] so [site facilitator knows] what is going on.

Outside of the triad, site facilitators formed relationships with school administrators because they supported the program (Frank) and when the materials were not available, site facilitators required "someone to troubleshoot for them" (Yvette). Other relationships, study mentors mentioned were technicians, the Open Learning Agency (OLA), and "senior administration [because they need] to have [a] better understanding of the advantages of NDDL and the role it offers to some of the smaller schools..." (Sarah). Eddie approached the relationship concept from an 'awareness'

perspective. He stated that his district had numerous "families on this program" and that it was necessary to "make them more aware of NDDL and what it has to offer...[and develop] that kind of relationship."

In summary, site facilitators formed relationships with the other members of the triad - the student and the mentor. Furthermore, they also formed relationships with school administration for the continued support and growth of the program. Further examination of interview data revealed that in most cases, these types of relationships were already formed, and new site facilitators stepped into these established relationships, and continued to work within the processes and procedures already in place.

Two of the four research questions pertained to site facilitator communication, and the last research question pertained to site facilitator relationships. Communication, in all forms, emerged as a fundamental component in site facilitator relationships.

Input

Providing input or having the opportunities to provide input, as part of communication, contributed to the growth and stability of these relationships. An interview question posed to the participants was if they, as site facilitators, had input into the project.

From personal experiences, study mentors felt that mentors received many opportunities for input. For example, Sarah stated that her principal had always asked "what do you think...; how could we do this."

The responses from study site facilitators varied from

"No," (Trisha) to "less and less," (Dean) to "Oh yeah, very much so" (Eddie). Study site facilitators who felt they had input in the NDDL project provided a list of opportunities that gave the input directly to NDDL project personnel. For example, Frank and Eddie gave their input "at training sessions" or "[during] meetings that happen online." Other opportunities for input included the FirstClass staffroom, the online forums, and site facilitator staff meetings. Zoe had the impression that "from the Open School end ... everybody there [was] open to comments and suggestions."

Likewise, Zoe stated that she provided input when her principal or the Open School requested information or suggestions. She felt that her "comments and feedback, about what works and what doesn't work, [were] listened to by [the] principal. [From] the Open School end ...they often [asked] ... for some input on something if they're looking for feedback on a situation that's come up or what have you."

Some participants felt they had input, but at the same time also felt they were beginning to lose some of their avenues and opportunities to offer input. For example, Yvette felt she lost opportunities of sharing information with site facilitators during audio conference staff meetings held with teacher-mentors, site facilitators and NDDL administration. She, as a mentor, reflected "as we [the NDDL project] grew, the mentors and the facilitators have been separated," resulting in separate staff meetings.

There were some participants who felt that they were not listened to. Verna reflected "sometimes our opinions [were] requested and we're made to feel like we [had] input, but it

[did not] seem to make a difference." Trisha was the only participant who felt that she had no input into the project. However, she did not elaborate on her answer.

Dean's response of "less and less," compelled the researcher to ask him if it was necessary for site facilitators to have input into the project. He responded:

> yes, because it would like being on a teaching staff where the administration didn't give you the opportunity to, at least discuss things like course operations, scheduling, budget and those things. You may not get to have the final say, but at least you feel that you've been able to put your case forward.

In summary, site facilitators established relationships between the triad members, the school administration, and the NDDL project administration, to ensure the success of the project. At the school sites, site facilitators established additional relationships with parents, and technical support staff. There was a wide range of perceptions with respect to input opportunities available to site facilitators in the NDDL project. Perceptions ranged from many opportunities to shrinking opportunities to no opportunities at all.

Components affecting the NDDL site

Participants responded to two questions pertaining to change: "what would make the NDDL site better?" and "what would negatively affect the NDDL site?"

Components that would make the NDDL site better.

Four components participants mentioned that would make an NDDL site better were program cost, course restructuring, additional time, and better connectivity.

Three of the nine participants, one site facilitator and two mentors, recommended a reduction in the cost of an NDDL course for the reason it would provide "more access to more kids" (Frank). Three participants, two site facilitators and one mentor, suggested "some of the courses could be rewritten to suit the distributed network approach, rather than the walk-step type program" (Frank). A better program could also be achieved by allocating more time to site facilitators. At the time of this study, the NDDL project administration allotted approximately forty-five minutes a day for site facilitation (Open School, 1998, website).

Wilma envisioned "the optimal arrangement." She preferred "to be able to do home visits to each of the students in their situations, bringing the software with [her] and doing onsite training, making sure everything works with the equipment they [the students] have at home." Yvette wanted mentors to check their email on a daily basis. All of the above would be accomplished if the allotment of site facilitation time increased. "Better connectivity" (Verna) between sites, and for the Internet would also improve the program.

Components that would negatively affect the NDDL site.

In contrast, initial responses to this question centered on mentor communication, breakdown of the triad learning model, cost of courses, and issues related to technology.

In terms of mentor communication from a site facilitator's view, Frank believed that "if the mentors at the other end [were not] very proactive" then communication was hindered, and the rate of student success declined.

Another concern for Sarah, in her role as site facilitator, was that "some of the mentors [did not have] ... the same perspective as we'd like them to have, in either terms of background [knowledge] or in terms of what acceptable turn-around time is."

A concern of all participants was "the breakdown of the triad." Right now," Verna stated "some of the mentors are terrific and some of them are pretty minimal."

Dean voiced his own concern, referring to it as "lack of connection." And he explained the difference between communication and connection:

> You can have somebody that communicates information really well, but doesn't make a connection with their learners, and it's that connection that is vital, on site or off site. [It's] the ability to reach out and find some way to connect with the learner on a human level, on a personable level.

Receiving equal mention as a component that has already negatively impacted the NDDL project was the cost of an NDDL course. The cost of a course, particularly for the rural schools, became a limiting factor with respect to student enrolment in NDDL courses. Dean explained that

> we're limited by access, by the fact that courses cost us five hundred dollars each, and the fact that ... in terms of what we generate per course from the Ministry is substantially less than that, so every time we give a student an NDDL course, we have to take money out of our general budget to cover that course.

Materials or resources would also have a negative

effect, especially if the materials were "difficult to access ...[or if] the websites didn't work," (Frank) or "if the materials weren't up to date, relevant" (Dean).

In terms of technology, participants alluded to the following concerns, "...interruptions in the delivery system...," (Dean) "...technical time isn't there to support it [computer hardware and software]...," (Sarah) or "...technology [was] to become less stable..." (Eddie). Zoe recognized another concern pertaining to the technology required by NDDL students. She explained that there is "extensive requirement of a lot of computer technology, specifically for NDDL, for ... home learners [and for this reason] a lot of the home-based learners are cut out of doing some of the courses because they just don't have access to the stuff at home and they're not willing to come into the school to use our stuff [equipment]."

Other concerns mentioned by mentor participants included "selection of the wrong candidate for the program," (Wilma) "senior administration that [do not] understand NDDL, or that [do not] value NDDL," (Sarah) and "[people working in NDDL not having] the attitude that this is a good way to get an education" (Yvette).

In brief, components that would make a site 'better,' according to participants, involved reducing the cost of an NDDL course, rewriting the courses so they are better suited to distance education delivery models, increasing the time allotment for site facilitation, and stabilizing the connections between school sites and the FirstClass server.

Components that would negatively affect the program were

a breakdown of communication between the members in the triad learning model, an increase in the cost of an NDDL course, and an increase in the instability of connectivity between NDDL sites and the FirstClass server. Also mentioned as a negative component was the requirement of home-based students to purchase computer hardware and software necessary for participation in NDDL courses.

Further Suggestions for Improvement of Sites

Further suggestions for improving NDDL school sites pertained to future roles and responsibilities of site facilitators, and a site facilitator selection process.

Future Roles.

In response to the question "how would you like to see the role of the site facilitator change in the future," it was apparent from the long pauses that this question or concept had not been given much thought. However participants offered the following suggestions.

Study mentors felt that if the role was to change, then first, an increase of time for site facilitation was necessary "to check ... email and do what is required" (Wilma), and to have the opportunity to "settle into that role and really focus on it" (Yvette).

Pertaining to the roles of site facilitators, Yvette suggested that if there was "an area where there's more than one school," then the site facilitator could be "the facilitator for a particular area, rather than a facilitator who doesn't have much time to do it." And Sarah wondered if "there maybe some room for some blending of ... facilitating and ... assisting with the learning." She pointed out that

> one thing that has to happen is that [site facilitators] become involved themselves, within the system, in some fashion. [The] more they're involved in the environment, the easier it is ... to keep on top of things in some sense, because they understand what's happening. But also, they become more effective with the students.

Trisha asserted, from a site facilitator's perspective, that "NDDL and the Open Learning Agency are going to have to be very proactive in actually training facilitators to be facilitators." And Eddie speculated that "the role of facilitator could change if the nature of the NDDL courses would change." He elaborated on the changes:

> Most of the courses ... are sort of a correspondence model, augmented with a subject-area specialist for questions and problems. If the nature of the course changed, the nature of the delivery change where it became ... much more electronic based ... where the mentor actually plays a much more active role in doing actual teaching in courses and stuff, then I see the role of the facilitator changing a lot, part one and part two a teacher.

Two participants felt that the current model was working well and was "reasonably effective" (Eddie). In contrast, one participant, Wilma, felt that because of the "direct contact between the mentor and the student ... the site facilitator [was] not really part of the triad in the DE model." This statement she applied specifically to home-based students.

In short, the topic of change for the role of the site facilitator had not been considered by participants at the

time of the interview. Participants who were content in their role as site facilitator saw no need to change the role. Whereas some participants preferred future changes in the areas of time allotment for facilitation, and in the structure and delivery of courses.

Site Facilitator Selection Process.

In response to the question "should there be a selection process for site facilitators," eight of nine participants stated there should be a selection process. Sarah, Verna, Trisha and Zoe argued that the process should be extended to include mentors, as well as students. However, Dean felt that a process was already in place:

> The administrator finds somebody on staff who has a high level of interest, and who can be freed-up to take that position ... the facilitation role is chosen at the site, and ... that's appropriate because that's the school's liaison.

This question also elicited a variety of suggestions pertaining to the selection process, such as work-related skills, personal skills, and work-related evaluation criteria.

Based on his own experience as a site facilitator, Frank stated that future "site facilitators would come with a developed bag of skills." He described "two distinct sets of skills: there's the technological end of the skills, which can be really rapidly learned, and then there's the second set of skills which are the people management stuff." Eddie reiterated the technological skills. He commented that the person he would look for would be one "who is technologically

capable or who's at least willing to learn, and learn in a relatively short period of time."

Three participants made comments with respect to site facilitators believing in a philosophy or a belief of the value of distance education. Zoe felt that site facilitators "have to buy the whole philosophy of it in order to really feel like [they] can contribute to it. If [they are] kind of muscled into doing it or taking it on as an extra load, then it's not a good thing." As a result of this belief, Wilma affirmed "you would get people who are both interested and committed to the program."

Another kind of commitment required of site facilitators, other than a commitment to distance education, was the commitment to the concept of change. Zoe commented on this concept:

> Not everybody can do this kind of work online with students. There needs to be a real commitment at this level; it's so new and there's so many new things that you have to deal with, and the change is so rapid that it takes a person who is comfortable with it, that kind of uncertainty.

To aid school administrators and the NDDL project administration, Sarah felt there needed "to be some criteria set" for selecting site facilitators, in addition to criteria used as "an evaluation process." The criteria provided "a way of saying 'move on' and let somebody else do the job, and [who] is committed to doing the job" (Sarah). The criteria Eddie felt important to a site facilitator selection process included "a person who is technologically capable ... some

experience in doing courses at a distance ... [and] the willingness to jump in with both feet."

In summary, participants supported the concept of a site facilitator selection process. The process would consider required site facilitator skills, commitment, and specific evaluation criteria as part of the selection process. Yvette described the ideal candidate for a site facilitator position. Site facilitators were "people who are comfortable with technology; believe in the distance ed.[sic] model; and work well with students, almost in a counselling mode, but yet are people [who] will make sure that the student is progressing, not just wasting time."

Accountability

Accountability was a topic of interest to the researcher. The researcher believed that if an individual performed the roles and fulfilled the responsibilities of a site facilitator as outlined by the NDDL project, worked with the technological equipment specified by NDDL, and was given the time by the school administration, to work with the students, then there should be some form of accountability to the NDDL project. For this reason, during the first interview, the researcher asked "who are you accountable to?" Seven of the nine participants stated they were accountable to their respective school principals. Wilma, Sarah, and Eddie also mentioned accountability to their students. The researcher was surprised to learn that two participants, Frank and Eddie, stated that they were accountable to no one. At his site, Frank stated that "there doesn't really seem to be anyone holding me accountable. But I write a report ...

But nobody comes and asks me for that."

Only one participant, Zoe, stated that in addition to her principal, she felt some accountability toward NDDL. She said

> as far as NDDL is concerned, I would say my accountability is more to the project, to the Open School, ... to make sure that I'm following the proper procedures in dealing with students and following through on what the goals and objectives of the project.

Communication of school site activities relied on the site facilitator communicating this information to school administration and NDDL project personnel. This demanded of the NDDL administration to trust the site facilitator in performing their expected roles and responsibilities, as outlined in the *NDDL Learning Guides*. At the time of this study, there was no procedure in place that allowed NDDL project administration to verify the roles and responsibilities carried out by site facilitators.

The issue of accountability, as one participant perceived it, required careful consideration on the part of NDDL administration, participating school districts, and members of the British Columbia's Teachers' Federation (BCTF). Yvette provided some explanation of this concern:

> We're all BCTF [British Columbia Teachers' Federation] members. And so if a site facilitator isn't doing his or her job, I [as a mentor] can message the site facilitator over and over again, and then say 'if something isn't happening' say [to the site facilitator] 'I'm going to have to contact the principal'.

> [Otherwise], if I just message the principal and say 'can you check the site if things are going well', [it] could be ... an ethics charge.

The charge Yvette referred to would be a violation of the fifth clause of the BCTF Code of Ethics, which states:

> The teacher directs any criticism of the teaching performance and related work of a colleague to that colleague in private, and only then, after informing the colleague in writing of the intent to do so, may direct in confidence the criticism to appropriate individuals who are able to offer advice and assistance (Annual General Meeting, Vancouver, B.C., 1990).

During the second interview, accountability was again brought forth in two questions: "are you accountable to NDDL in any way?" and "should there be a form of accountability on the part of site facilitators to NDDL?" The rationale for asking these more direct questions, was to determine if the participants, who agreed to work within the structure and guidelines of the NDDL project and who used the equipment and resources provided by the NDDL project, felt that they were accountable, formally or informally to the NDDL project.

Accountability to NDDL.

To the first question of accountability to NDDL study, participants, both mentors and site facilitators, believed they were not accountable to NDDL.

Two participants, Wilma and Eddie, indicated they were not sure if they were accountable or not. Wilma, for example, stated that she was "probably" accountable, but she was "not aware of exactly how." However, Zoe's response was the only

affirmative one to this question. She considered herself "sort of ethically accountable in the role [she has] taken on." Her ethical accountability was in the form of an understood agreement:

> My agreement as taking on the role as facilitator is that I'm going to work in the role model that's been created to communicate with mentors, and with the students; and with the people who are in the background, in the administrative roles, to make sure that I'm carrying out my part of the bargain. I would like to think that if I'm not doing ... the job, like not staying in touch with the students, not responding to E-mail, or following up with cases that arise, then I'm not really doing the job. So I do feel I'm accountable.

The data indicated that participants felt no accountability to the NDDL project, except for one who felt an ethical accountability.

Site Facilitator Accountability.

The subsequent question 'should there be a form of accountability on the part of site facilitators to NDDL' elicited from the study mentors the response that site facilitator accountability to the NDDL project would promote problem-solving at the school sites. Wilma explained "often we have difficulties with specific sites, it is very awkward to get through to the site facilitator. Basically, if they have no accountability that any of us [mentors] are aware of ... it's very hard to get problems resolved." Furthermore, accountability of site facilitators would provide the NDDL administration with the opportunity to replace ineffective

site facilitators. Sarah offered this argument, "if NDDL is going to have [the] strength it needs to have some say in the hiring [of the site facilitator]...[and if the] facilitator is a lousy facilitator, [then] NDDL should be able to say 'no, find somebody else.'"

The study site facilitators viewed accountability as a means of ensuring "the infrastructure," (Dean) and all of its components, such as computers, connectivity, a place for students to work, and site facilitators utilizing all facets of the NDDL project. Eddie stressed that "at least ... the facilitators have to report to the organizers of NDDL in some way, shape or form."

Yet, Zoe felt there already existed a form of accountability, "even though it's not stated or not written in a detailed form." She elaborated:

> I like to think that the people involved will be able to self-monitor and do take on the role and agree to facilitate in the way that the project has asked them to. I like to think that people are capable of performing up to a standard that's going to work for everybody; that they don't have to be watched.

Two participants felt accountability should not reside with the site facilitators, but with the NDDL project to the paying customers, ensuring that NDDL students successfully complete their courses.

In summary, participants identified the school principal as the individual to whom they were accountable, and this correlated with their respective collective agreements. Furthermore, participants felt they were not accountable to

the NDDL project. Only one participant, a mentor, felt she was ethically accountable to the NDDL project, but she also believed that a form of site facilitator accountability already existed in the form of site facilitators working to the best of their abilities within the structures outlined by the NDDL project administration. Two participants held the belief that the NDDL project, the mentors and administrators, should be held accountable, not to the NDDL project, but to the "paying customers," (Verna) the students and their parents.

The NDDL project administration, at the time of this study, did not hold site facilitators accountable for the activities occurring at the various sites, because site facilitators did not have working contracts with the NDDL project.

Summary

In summary, the information in this chapter focused on five topics: the views of success, the roles and responsibilities of site facilitators, the communication links and relationships established by site facilitators, the improvements suggested for better NDDL school sites, and the issue of accountability.

The participants concurred with the three criteria for a successful school site outlined by the NDDL administration. The three criteria were school site participation in the NDDL project with minimal technical problems, students completing NDDL courses, and students returning to the NDDL project to complete successive courses. The participants listed the following additional criteria as indicators of a successful

school site: a designated room for NDDL equipment and NDDL students, students requiring minimal assistance with course work, and schools registering students in NDDL courses when onsite instruction or specific courses are unavailable.

Data indicated that the roles and responsibilities performed by site facilitators were in the areas of technology, communication, instruction, motivation, administration, and problem-solving. The skills and training required for the above roles and responsibilities included technology, interpersonal communication, problem-solving, knowledge, and individual skills training. Site facilitation training was also strongly recommended as a necessary skill. A site facilitator role that emerged from the data was that of student advocate. This role came about because the site facilitator, due to their proximity to the student, became privy to information not accessible to the teacher-mentor. The site facilitator was therefore able to mediate and negotiate on the student's behalf with the teacher-mentor or with the NDDL project administration.

Site facilitators established communication links, within their working environments, with the triad members, the school principal and the school staff. Outside of their working environments, communication was conducted with NDDL administration, interested teachers, students and parents.

Further to the discussion of communication, site facilitators established relationships with triad members, school administration and staff, and NDDL project administration. These communication links and relationships were established to ensure a successful NDDL school site and

the success of the NDDL students.

Suggested improvements to the NDDL project included a reduction in the cost of an NDDL course, a restructuring of NDDL courses to better suit mediated course delivery, and an increase in assigned time for site facilitation. Also supported by the participants was the development of a site facilitator selection process.

With respect to site facilitator accountability, the participants stated that they were not accountable to the NDDL project, for the reason that they did not have a working contract with the NDDL project. They did agree that site facilitators should be accountable to the NDDL project. This accountability ensured that problems occurring at school sites would be quickly solved; that a means of replacing ineffective site facilitators was available to the NDDL project administration, and that the infrastructure remained intact.

Discoveries from collected data, not found in the literature, were the role of student advocate, the skills and training in site facilitation, and the need for site facilitator accountability.

CHAPTER FIVE: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

This chapter summarizes the research problem, the review of related literature, and the methodology used to gather the data from the participants, followed by an analysis of the findings and a discussion of collaborative leadership follows. The chapter concludes with implications for distance education and recommendations for further research.

Summary of the Study

This section reviews the research problem, the review of literature and the methodology that formed the basis of this study.

In a brief summary, the data indicated that site facilitators performed the roles and responsibilities related to technology, communication, motivation, monitoring progress and administration. A new role and responsibility that emerged from the data was that of student advocate. Participants also endorsed training in interpersonal communication, mediation and negotiation skills, as well as site facilitation skills.

The data also indicated that site facilitators communicated with and developed relationships with individuals who worked within and outside of their school sites.

Success indicators for an NDDL school site included participation of schools, students, site facilitators, teacher-mentors, and family in the NDDL project, in addition to a designated room in the school for NDDL student-mentor conferencing and instruction with the necessary computer

equipment, students working with increased independence, and students working competently with the computer equipment and software programs.

Exploration of the topic of accountability on behalf of the site facilitator to the NDDL project revealed confusion as to whether or not site facilitators were accountable to the NDDL project. Site facilitators were accountable to their immediate supervisor or school administrator.

The Research Problem

For many years, students living in rural areas have been completing school courses by correspondence education. Students registered in correspondence education programs received textbooks and workbooks in the mail, in addition to instructions for completing the course work and for mailing assignments or tests to the tutor for correction and receipt of a course mark. Students also received the name of the assigned course tutor.

In British Columbia, the Ministry of Education, Skills and Training and the Open Learning Agency (OLA) combined their resources to form the Open School. The Open School, with nine regional Distance Education Schools, offered correspondence courses to the students of British Columbia, Saskatchewan and the Yukon. The New Directions in Distance Learning (NDDL) project was a collaborative effort among the Open School, the Distance Education Schools, and participating school districts. NDDL was "designed to provide mediated delivery of distance education programs to ... students" (URL: www.openschool.bc.ca/nddl/about.html). The term distance education was one of several referring to the

implementation and use of technology to enhance the correspondence course process and student success. Working in the NDDL project, the student became part of a triad learning model; the other two members were a teacher-mentor and a site facilitator. A member of the triad that warranted further understanding was the site facilitator.

Site facilitators worked on location with the students. They were responsible for maintaining the learning environment, assisting with learning plans, and completing administrative duties. The need to further explore the roles and responsibilities of site facilitators resided in the fact that there have been no observations of the roles and activities site facilitators performed at the school sites. One reason for the lack of observation was that NDDL sites were scattered throughout the province of British Columbia.

The purpose of this study was to understand the roles and responsibilities of site facilitators in successful NDDL sites, to learn with whom site facilitators communicate with inside and outside their working environment, and to discover with whom site facilitators build working relationships. The following research questions were asked:

1. What are the roles and responsibilities of site facilitators in successful NDDL school sites?

2. Who do site facilitators communicate with within their school sites that ensures the success of the New Directions in Distance Learning project at the school site?

3. Who do site facilitators communicate with outside their working environment to ensure the success of the New Directions in Distance Learning project at the school site?

4. What relationships are created and maintained by site facilitators?

Review of Related Literature

Topics that pertained to site facilitator roles and responsibilities were common distance education communication methods, Stohl's (1995) concept of networking, collaborative leadership, and tutor and site facilitator roles.

Communication.

A primary responsibility of site facilitators was to establish and maintain communication. The three forms of communication commonly employed in distance education were face-to-face communication, two-way communication, and didactic conversation.

Face-to-face communication is usually associated with a classroom filled with students and a teacher, positioned at the front of the classroom, conducting a lecture. Specifically, teachers and the students are "physically present at the same time, at the same place" (Keegan, 1996, p.25). The advantages of communicating face-to-face include the opportunity to ask for clarification of information, to observe facial expressions and body language, and to build or strengthen a relationship. Keegan believed that with the development of video conferencing technology, face-to-face communication would be restored in a distance education environment.

Two-way communication, a second method of communication, exchanges information in a feedback manner. Bååth (cited in Keegan, 1996) examined two-way communication by applying various teaching methods to distance education models. He

discovered that two-way communication applied to distance education, particularly when exchanging information using the telephone or the mail service. By the very nature of the method of communication, information was exchanged in a question-and-answer manner, hence two-way. Bååth also observed that the goal of the teaching model affected the manner of communication. He pointed out that when the goals of the program were fixed, then more emphasis was placed on the learning material. Whereas, when the goals of the program contained some flexibility, more emphasis was placed on communication, which allowed for more spontaneity. In other words, if the goal of a course was to complete the course as quickly as possible, then the patterns of communication focussed on the students and tutors asking questions and providing answers specifically to the questions asked. If, however, the goal of the course was to understand the course material, resulting in a slower working pace, then the communication patterns were more relaxed and two-way communication evolved into didactic conversations.

Didactic conversations took two-way communication a step further by focussing on the student and the learning. All activities and communication of the tutor and the educational institution supported the learning of the students. In Holmberg's (cited in Keegan, 1996) seven bases of didactic conversation, phrases such as "feelings of personal relation between the teaching and learning parties promote study pleasure and motivation" and "the atmosphere, language, and conventions of friendly conversation favour feelings of personal relation" (p.95) indicated the development of

relationships between tutors and students. Holmberg believed that when distance education used a didactic conversation model, students were motivated, and information that was delivered in a conversational manner would be easier to understand. Didactic conversations may also be found in organizational networks, like those described by Stohl (1995).

Networking.

Stohl (1995) described organizational networks as "a tapestry of communicative relationships" (p. 22) in which information created and interpreted was based on an individual's associations or affiliations. Rephrased, within associations and affiliations, individuals created links or relationships with other individuals. A series of links created a network that had a unique flow of information.

A network link, as defined by Stohl, indicated "the presence of a connection, a relationship between two people" (p.35). Relationships were important for they helped make "messages make sense" (p.75) and helped identify individuals in terms of "status, power and even the trust people have in us" (p.75). Stohl also commented on how relationships have gained some notice with the implementation of computer technology:

> The introduction of new communication technology is viewed by many in relational rather than by technical terms. ...millions of dollars [have been] spent on computer technology intended to keep people in touch with one another. Electronic mail systems are designed to provide flexible, informal channels that facilitate

> relational development across great geographic distances. (Guterl, cited in Stohl, 1995, p.77)

This last comment was applicable to distance education. Communication technology, such as E-mail, computer conferencing and audio conferencing, allowed for the success of the NDDL project.

Roles and Responsibilities.

A review of literature generated a wealth of information referring to tutor roles and responsibilities in correspondence education; however, literature pertaining to site facilitator roles and responsibilities, in distance education, was scant. Sherry (1996), one researcher who has studied site facilitator roles and responsibilities, described the site facilitator role as an extension of the course teacher in the distance education classroom. Site facilitator responsibilities consisted of motivation, encouragement, and maintenance of classroom discipline. Equally important was the responsibility of maintaining technological equipment.

Willis (1993) viewed the site facilitator as a communication bridge between the student and the teacher. Lewis (1981) included "answering questions" and "extensive record keeping and administration" (p.24) to the list of site facilitator responsibilities.

In short, when referring to distance education site facilitators, scholars and practitioners listed similar roles and responsibilities as those of correspondence education tutors. The same may be said for the skills and training required by site facilitators.

Skills and Training.

Davie (1988), Markowitz (1990), and Mauger and Bouchart (1991) listed the skills tutors required in correspondence education. Even though the skills were designed for tutors, some of the skills applied to site facilitators, such as "counselling ... [organizing] ... [and motivating]" (Mauger and Bouchart, 1991, p.8).

Mauger and Bouchart (1991) recommended that training for tutors included the skills listed above. In particular, Sherry (1995) specified "hands-on training with equipment they have access to, or are expected to use in the future" (p.7) as requirement training for site facilitators. Again, in the same way tutor and site facilitator skills overlapped, so too did the training. The noticeable difference was the required training in technology for distance education.

Methodology

This study focussed on the NDDL project site facilitators, in an effort to understand their roles and responsibilities and to determine what communication patterns and relationships site facilitators developed.

The nine participants in the study included six site facilitators and three teacher-mentors. Four participants worked in regular schools, three worked in Distance Education Schools, and the remaining two participants worked in Continuing Education Centers. Collectively, the participants averaged three years of experience.

The researcher collected the data by using E-mail questionnaires and telephone interviews. The FirstClass server of the NDDL project was the vehicle for sending and

receiving Consent forms, questionnaires, and interview transcripts. E-mail was the preferred method of communication and the sending of documents by both the researcher and the participants. Telephone interviews were chosen for three reasons: first, they were less expensive when compared to travelling throughout British Columbia for personal interviews; second, telephone interviews decreased the "interviewer effect" (Hyman, 1954); and third, telephone communication was one of the primary means of communication between all individuals involved in the NDDL project.

The questionnaires provided demographic information on the site facilitators and the activities at their respective sites. Telephone interviews occurred in November 1997, and again in February, 1998. The duration of the first interviews averaged thirty to thirty-five minutes, whereas the second interviews were ten to twenty minutes in length. Participants received and returned interview transcripts via the FirstClass server.

Data analysis consisted of coding initial themes, open coding and domain analysis. Conducting "member checks" (Merriam, 1988, p.169) and presenting the data within its context, ensured the authenticity of the data. McMillan (1996) referred to data presentation within its context as reliability, specifically "what is recorded as data is what actually occurred in the setting that was studied" (p. 251).

Study participants.

The participants of this study, six site facilitators and three mentors, worked in regular schools, Distance Education Schools and Continuing Education Centers, as

teachers or administrators. Their involvement in the program started with a personal request to participate from either an NDDL administrator or a school administrator. One participant transferred to the role of site facilitator from a previous position. All participants had previous experience with either distance education or with the New Directions in Distance Learning (NDDL) project.

Study sites.

All of the school sites offered both correspondence and NDDL courses to students in British Columbia. Technologically, all sites used the FirstClass server, the ClarisWorks software, and a PaperPort desktop scanner. There was variety in the use of computer hardware and software, including the use of Macintosh, IBM or IBM compatible computers.

Analysis of Findings

This section begins with a review of distance education in British Columbia and the New Directions in Distance Learning (NDDL) project. Also, a brief description of the participants and their sites is presented. An analysis of the data of the research questions concludes this section.

Distance Education in British Columbia

In British Columbia, correspondence courses were renamed distance education courses. The British Columbia Distance Education program, formerly known as the Correspondence Education Branch, was a program within the Open Learning Agency, which offered through nine regional Distance Education Schools distance education courses to students living in British Columbia. Each Distance Education School

was a designated center for specified school districts. For example, the North Coast Distance Education School (NCDES) provided correspondence courses for "all students in School Districts 50 (Haida Gwaii/ Queen Charlottes); 52 (Prince Rupert); 54 (Bulkley Valley); 82 (Coast Mountain); and 92 (Nisga'a). Also, any students who lived within the territorial boundaries of the NCDES were also able to acquire distance education courses.

Students eligible to enrol in distance education met three criteria:

1. [were] at least school age ...
2. [were] out of school, or is enrolled in a public or independent school and [had] written permission of the principal of that school to take a distance education course [and]
3. [had] standing in the prerequisite course.

(Distance Education K-12 Guide Book, 1997, p.5).

Both school-based students and home-based students registered in distance education courses by completing an application form which was signed by a parent, a guardian, or a school principal; paying tuition fees; and receiving the required course materials. Materials included a text book and a workbook, accompanied by envelopes for mailing in assignments and tests. For some of the courses, such as French, Chemistry or Accounting, additional material sent to the student may have included audio cassette tapes, chemicals or computer disks. Tutors were assigned to the student according to the subject matter studied. All tests were supervised and mailed to the Distance Education School where they were

redistributed to the appropriate tutors for marking. The use of faxes was possible only if prior arrangements had been made with the Distance Education School. When a school-based student completed a course, a certificate was issued by the Distance Education School and the mark was transferred to the student's school record. Home-based students also received a certificate of course completion, however, their marks were recorded and kept at the Distance Education School.

This process was similar to the process Valore and Diehl (1987) described in *The Effectiveness and Acceptance of Home Study*. They wrote:

The Home Study Process

1. Enrolment application completed at home, then submitted by mail.
2. Acceptance of enrolment at school.
3. Lesson materials sent to enrollee.
4. Student completes lessons at own pace, according to directions provided.
5. Student receives individual assistance whenever necessary, via contact with the school, and additional instructional materials are sent to the student as required.
6. Examinations or projects are completed at home and mailed to the school.
7. Examinations graded and recorded at school.
8. Grades and examinations returned to student.
9. Student receives credit for work completed; progress reports are given.
10. Upon completion, student receives a diploma or

certificate of completion .... (p.14)

A difference between the two mentioned processes was the absence of a tutor in the process outlined by Valore and Diehl.

New Directions in Distance Learning

In brief, the NDDL project provided distance education students, enrolled in senior secondary courses, a support system which employed technology and a triad learning model.

The project provided students the opportunity to complete courses with the assistance of technology and a subject specialist, or a teacher-mentor. The technology that students used were one-to-one telephone tutoring, E-mail, group audio conferencing, and computer-conferencing. The site facilitator maintained the distance education environment and ensured that the student had access to equipment and resources. The NDDL project had the following goals:

> to increase and improve the curricula available for mediated instruction - a term which is meant to cover teaching formats ranging from home study, to distance tutoring of students in small schools, to classroom-based courses which use a significant percentage of independent study materials.
>
> (New Directions in Distance Learning, 1995, p.1).

The NDDL project also considered the following issues during its development: the use of a variety of media; the flexibility of course design to meet student and teacher needs; the "use of the community as an instructional resource" (New Directions in Distance Learning, 1995, p.2); the development of higher level thinking and learning skills;

and the establishment and maintenance of a triad learning model.

The NDDL triad was a learning model that consisted of a teacher-mentor, a site facilitator (a teacher-facilitator), and a student.

School requirements for participation in the NDDL project included a dedicated space for NDDL equipment and the students at the school site, an individual, such as a teacher, designated as a site facilitator, the required computer hardware and software, and the telephone and data lines.

The registration process was similar to the Distance Education School registration, with the additional step of submitting the application form to the NDDL administration.

Research Question #1:

What are the roles and responsibilities of site facilitators in successful New Directions in Distance Learning project school sites?

Lewis (1993) asserted that the site facilitator acted "as a bridge between the students and the instructor, keeping informed of student interests and progress, and providing guidance and answering questions as needed" (p.31). The data collected from the participants supported this concept of site facilitators being a bridge, or a connection, between the New Directions in Distance Learning (NDDL) project administration, mentors, students, parents, and school staff.

Seven categories of roles and responsibilities, in addition to recommended skills and required training, emerged from the data collected from the participants. The categories

were technology, communication, instruction, motivation, problem-solving, administration and monitoring progress. Within each category were specific activities, that not only ensured the attainment of the NDDL project goals, the success of the student, and the success of individual NDDL school sites, but that also supported the analogy of a site facilitator being a bridge.

A role that emerged from the data that was not found in the review of literature was the role of student advocate. Sarah expressed it as "working as a liaison," or as Eddie stated "[acting] on behalf of the student to talk to the mentor." What made this role important was the relationship that developed between the site facilitator and the students. One participant pointed out that the student would share information with the site facilitator, yet would withhold the same information from the mentor.

Technology.

Technologically, each school site was responsible for the acquisition and installation of all necessary technological equipment for participation in the NDDL project. Study participants listed site facilitator technological duties to include setting up hardware in the designated NDDL classroom, installing required software on the computers, and ensuring all the connections for the telephone, facsimile, E-mail and Internet were in working order. Furthermore, a site facilitator's responsibility was to understand, to be able to work with and to troubleshoot various software. The data supported Sherry's (1996) studies which have shown that the site facilitator was "responsible

for [the] smooth running of equipment" (p.10).

Also, participants, who were teacher-mentors, emphasized the need of site facilitator participation in training programs provided by the NDDL project administration.

Communication.

A crucial role and responsibility of site facilitation was communication. Site facilitators engaged in three methods of communication: face-to-face, two-way, and didactic conversations.

The site facilitator in the NDDL project offered the face-to-face communication. The participants felt that a responsibility of the site facilitator was to initiate, establish and maintain communication with all members in the triad learning model. Initiation and establishment of communication came about through recruitment and registration of students. To maintain the communication, site facilitators engaged in face-to-face communication with students who worked at the school sites, and utilized two-way communication and didactic conversations with the home-based distance education students. This study addressed a concern among distance education practitioners which was the lack of face-to-face communication between the tutor or mentor and the student. Bernier (1995) warned that "isolation from instructors and lack of interaction with other students [were] potential drawbacks of distance education" (p.2).

Further, site facilitators reported that they used two-way communication to determine if students had received the necessary materials, if students had completed assignments, or if students had any questions related to the course

material or to the NDDL project. Two-way communication was noticeable when using audio conferencing, facsimiles, and E-mail. This data validated Bååth's findings (cited in Keegan, 1996) which demonstrated that two-way communication, the question and answer feedback process, was applicable to distance education.

The success of didactic conversations, Yvette demonstrated, is evident in the instances when her students, after the completion of a course, kept "giving [her] a 'hello' once in a while" through E-mail communication. The data also indicated that didactic conversation may be used to build connections. Building a connection, Dean defined, was "the ability to reach out and connect with the learner on a human level." Stohl also spoke of connections, but in terms of relationships and building networks. The didactic conversation was very much part of Stohl's concept of relationship, which encouraged "extensive, open, friendly, face-to-face encounters," and nurtured the "development and growth of individuals" (p.138). Applied specifically to telephone tutorials, Mauger's (1991) described three ways didactic conversations assisted communication during telephone tutorials: first, "warmth can be expressed more easily and effectively by the voice than in writing," second, "feedback on particular points is much quicker and less susceptible to misunderstandings," and third, "a phone call tends to reduce the learner's sense of isolation" (p.93).

Recognition of how central the site facilitator is to maintaining the flow of communication was realized when communication faltered or ceased between the mentor and the

student. The site facilitator, because of the proximity to the student and the ability to offer face-to-face communication, functioned as a bridge between the two parties.

Instruction.

The responsibility of instruction included activities such as teaching students how to use the computer hardware and software, in addition to answering questions related to course content. Other instructional activities gleaned from the data were student orientation to the NDDL project and teaching time management.

Motivation.

Participants felt that motivation meant "encourage" when describing this particular role and responsibility. Specifically, the mentor participants in this study felt that motivation meant encouraging "students to try...things," (Yvette) encouraging students to "contact the mentor," (Verna) and encouraging the student "to set deadlines" (Frank). Participants also felt that "keeping the frustration level down" and helping "students be comfortable in a technological environment" were other responsibilities that supported encouragement. Mauger (1991) spoke of motivating students in terms of supporting and encouraging students throughout the duration of the course.

Problem-solving.

Problem-solving was inferred in many categories, yet received little mention as an actual role. For example, problem-solving in technology was troubleshooting. Problem-solving, for the Participants, was part of every category of

the roles and responsibilities they performed, including technology and student advocacy. In the review of literature, problem-solving referred to answering student questions or resolving concerns pertaining to assignments and tests.

Administration.

Administrative tasks included registering students, shipping course materials, monitoring tests, and supervising students. This data supported the administrative duties outlined by Erdos (1967) and Sherry (1996). However Erdos and Sherry stated that evaluating assignments or grading papers were part of the administrative duties fulfilled by site facilitators. However, participants did not mention any of these responsibilities.

Site facilitator responsibilities in terms of administration, according to the participants, included recruiting and registering students, locating resources, monitoring tests, sending tests to mentors, obtaining final course grades, issuing certificates, and interacting with parents if there were problems.

Monitoring progress.

Monitoring progress has been frequently noted as a responsibility of tutors. The participants also spoke of monitoring student progress. But monitoring student progress also included "tracking down students when they disappear" (Sarah), assisting students in maintaining their timelines, and keeping students organized. This data confirmed the findings of Meakin (1982). He stated that a specific task for an advisor, someone working in the vicinity of the student, similar to a site facilitator, was "monitoring a student's

progress and assisting with selection of appropriate courses" (p.158).

Other roles and responsibilities that did not fit into the above categories and were not found in the review of literature consisted of "presenting [the] NDDL project in a positive light" (Zoe), making house calls to home-based students, setting up "some external tutoring" (Frank), and becoming a "co-learner" (Verna) with the students.

In short, the NDDL site facilitator performed the role of a bridge, creating a link between the mentor and the student. Through the technological responsibilities, the site facilitator ensured the physical lines of communication were working for mentor - student communications. Using the different methods and modes of communication, site facilitators assisted in interpreting messages and providing a caring feeling to the student, thereby decreasing the student's feelings of isolation. From this caring emerged the new role and responsibility of student advocate. Site facilitators worked on behalf of the students in talking with mentors, NDDL administration, or school administration and staff.

All other roles and responsibilities carried out by the site facilitator supported the learning of the students and the teaching activities of the mentors. To fulfill the requirements of the roles and responsibilities, the participants recognized that site facilitators required certain skills and training.

Skills and Training

The literature had an abundance of information

pertaining to skills and training required by tutors in correspondence education. Information regarding site facilitator skills and training was scant, yet similar to tutor training. The participants felt training was necessary in the areas of technology, communication, problem-solving, knowledge, and personal skills. Other necessary site facilitator skills included time management, NDDL regulations and procedures, and site facilitation.

Technology.

Required training in technology centered on the use and familiarity of computer hardware and software. Also required of the site facilitator was the ability to troubleshoot.

Communication.

In addition to interpersonal communication skills and in response to the new role of student advocate, participants felt it necessary for site facilitators to receive training in mediation and negotiation. Training was necessary "so they [site facilitators] feel comfortable acting as a student advocate, and doing it in a respectful way" (Sarah).

Problem-solving.

Problem-solving skills became important for the participants who were mentors because, for them, it was more important to solve the problem rather than "[worry] about the cause of the problem" (Sarah). It became a priority to reestablish communication or complete an assignment before determining what caused the problem in the first place.

Knowledge.

When participants mentioned knowledge as a skill, further exploration defined this skill to mean having the

ability to become a co-learner with the students, in addition to keeping oneself up to date with the technology and with the content of different subject matter courses. The participants offered no suggestions on how to acquire this skill.

Personal skills.

Individual or personal skills referred to one's humour, patience, and resiliency. Participants also felt that site facilitators required flexibility and commitment to work within the structure of the NDDL project.

Other skills.

Other skills that required training were time management, and comprehension of NDDL regulations and procedures. Information on the organizational structure of NDDL, along with the NDDL regulations and procedures were important "so you [knew] all the different components and all the things that [were] supposed to happen when and where" (Eddie). Site facilitators also required the skill of "getting past some of [the students'] reservations" (Eddie). Eddie defined reservations as the reluctance, the hesitancy, or the refusal to work with technology.

In short, participants recommended facilitation training that focussed on "how to be a facilitator," (Trisha) "how to run your own program as a facilitator" and "how to develop a community of learners" (Frank). The findings of the study support the information presented by Mauger and Bouchart (1991) who listed counselling, responding, and interacting as required tutor skills.

Official training of NDDL site facilitators was limited

to the summer sessions at the Open Learning Agency in Burnaby or at Silver Star Resort in Vernon, British Columbia. Sarah offered a suggestion of providing or "doing workshops at a distance." She explained, "let's train by using [the equipment]."

In summary, site facilitator roles and responsibilities were similar to those of correspondence education tutors, with the expectation of site facilitators needing to know how to use technology and how to solve technological problems. A role and responsibility unique to the site facilitator position was the role of student advocate.

Skills and training deemed necessary for site facilitators included technology, negotiation and mediation in response to the student advocate role, and site facilitation. To augment the technology training, one study participant strongly recommended training site facilitators online, similar to distance education students.

Research Question #2:

Who do site facilitators communicate with within their school sites to ensure the success of the New Directions in Distance Learning project at the school site?

The data provided evidence that site facilitators, within the NDDL project organizational structure and their working environment, communicated with students and mentors of the triad, school administrators, school staff, and parents. The purpose of the communication was to ensure the success of the NDDL school site and the success of the NDDL student.

The data also supported Stohl's concept of

communication, which she defined as a link between individuals, that generated and interpreted messages with the goal of creating understanding. Links were also communication patterns outlined by an organizational structure.

Research Question #3:

Who do site facilitators communicate with outside their working environment to ensure the success of the New Directions in Distance Learning project at the school site?

It was of interest to note that the participants had their own views on who was within their working environments and who was outside their working environments. For example, mentors, technical support staff, and NDDL project personnel, such as the NDDL project coordinator, and the online administrator, appeared both within and outside the site facilitator's working environment.

Furthermore, the participants also communicated with inquiring parents and students. This data supports Stohl's view of permeable boundaries,

In short, the second and third research questions indicated a small collection of individuals with whom site facilitators communicated, either within or outside of their working environments. Whether an individual was considered to work within or outside the working environment was determined by the site facilitator.

Research Question #4:

What relationships are created and maintained by site facilitators?

Each person the site facilitator communicated with, established a link. Links developed into relationships, and

a collection of relationships made up a network.

Participants indicated they established relationships with the triad members, the school principal and the school staff. One participant stated that she spoke to everybody that was connected to the school site that would ensure the success of the school site and the students. Relationships also developed with NDDL project personnel. The findings of the study support the concept that networks were communicative relationships that individuals built with others.

In summary, site facilitators established links and relationships with triad members, school administrators, school staff, and NDDL project administration, to ensure successful school sites and the success of their students.

Collaborative Leadership

The Open School defined the NDDL project as "a collaborative program involving school districts, Distance Education schools, and the Open School" (1997, URL: www.openschool.bc.ca /nddl/about/overview_tx.html). Chrislip and Larson's (1994) collaborative leadership model appeared to fit the organizational structure of the NDDL project. There were, however, some missing components of this model, on the part of the NDDL project.

Definition of collaborative leadership.

The NDDL project, was an example of a "mutually beneficial relationship" (Chrislip and Larson, p.5) established between the Open Learning Agency's Open School, Distance Education Schools, and the school districts in the province of British Columbia. These stakeholders had the

mutual goal of providing an education to students living in British Columbia, particularly to students who lived in rural communities or rural areas, who were having difficulties completing courses necessary for graduation.

One shared vision held by all NDDL stakeholders was to offer mediated delivery of distance education courses to students working on correspondence courses. The strategy to meet this vision was the NDDL project, which provided a FirstClass server, a triad learning model, and an integration and application of technological resources. Not only did the NDDL project meet the terms of the collaborative leadership definition, "a mutually beneficial relationship between two or more parties who work toward common goals by sharing responsibility, authority, and accountability for achieving results," (Chrislip and Larson, p.5) it also met the requirements of developing a shared vision and "joint strategies" (Chrislip and Larson, p.5) to address mutual concerns.

Criteria of Collaborative Leadership

The study data provided the evidence that the NDDL project met the terms and the criteria of collaborative leadership. The criteria consisted of producing concrete results, collaborating with stakeholders, overcoming significant barriers, and recognizing success.

Producing concrete results.

The first criterion of collaborative leadership was the production of concrete results. The reports of study participants included increased course completion rates and the increased number of students returning to the NDDL

project to complete subsequent courses in this mediated format.

Collaborating with stakeholders.

The second criterion was collaboration across many lines of organizations and individuals in an attempt to solve problems. Information and knowledge flowed between all stakeholders who were responsible, in some way, for providing an education to students. Stakeholders that participated in the collaboration were the Open School, the Distance Education Schools, and the school districts. Within each of these groups, communication flowed among various subgroups and individuals. For example, within the Open School, communication flowed to the NDDL project administration and personnel. Within the school district, it was necessary to communicate with school district administrators, school administrators, school staff, students, and parents. In some cases, small business and large companies may also have been considered stakeholders.

Overcoming significant barriers.

The third criterion asserted that to attain the vision of mediated delivery of distance education courses some barriers to overcome were the technology, the triad members and their employment contracts, and the funding of the program and the technology.

The obstacle, in terms of technology, was deciding what hardware and software would best meet the needs of the participants. In the NDDL project, Macintosh computers, Paperport scanners, graphic tablets, and polycoms were the preferred hardware. Preferred software included the

FirstClass server, ClarisWorks, and Netscape. The obstacle lies in deciding whether to work with Apple Macintosh technology or with DOS/Windows technology. These operating systems are very different and in a distance learning environment a common problem is the incompatibility between the two systems. Participants using Macintosh hardware and software cited problems with receiving E-mail with attached documents that were sent by a DOS/Windows computer. The reverse was true for the participants using DOS/Windows hardware and software.

Obstacles pertaining to the triad model included the recruitment of teacher-mentors and site facilitators. Teachers already had an existing contract with their respective school districts. The NDDL project, a program that is not 'owned and operated' by the school districts, had to find a way of providing teachers with time, in their teaching assignments, to actively participate in the triad. The obstacle to overcome was reaching a suitable agreement between the school district, the school administration and the teacher's union.

The next obstacle, funding of the project, was in answer to the question: "Who ?" For example, who would buy the computer equipment and pay for the Internet connection: would it be the school, the school district, the Open School, or the Ministry of Education, Skills and Training.

Recognizing success.

The last criterion of collaboration was the recognition of success. Success for the NDDL project, as defined by participants, consisted of having the required technology in

place and working, students completing courses, good participation and communication within the triad learning model, and good support from the parents of home-based students. Also, an increase in the number of schools participating in the NDDL project, as well as an increase in the number of students returning to the project were considered signs of success. Success defined by Chrislip and Larson meant solving problems, bringing diverse people together in constructive ways, and engaging citizens on issues that were of concern to them.

The issue of concern of the NDDL stakeholders was delivering distance education courses to students living in British Columbia, as well as meeting the criteria of success as outlined by the NDDL administration and the study participants.

The problem was solved when the stakeholders in the NDDL project, the Open School, the Distance Education Schools and the school districts, developed the NDDL project that offered mediated delivery of distance education courses. The successes of the program were those successes listed by the participants and the NDDL administration.

The collaboration criteria Chrislip and Larson listed included producing concrete results, communicating across many lines, overcoming significant barriers, and recognizing success. Further to this discussion, the next question to be answered is whether the site facilitator is a collaborative leader?

Site Facilitators as Collaborative Leaders

NDDL site facilitators, particularly the participants,

were collaborative leaders. The vision, from their perspectives, was to create a learning environment in which students successfully used technology to complete their courses. The process that they were committed to was the triad learning model and the fulfilment of their roles and responsibilities. The commitment was also evident in the site facilitator attitude "I do what has to be done to solve the problem" (Sarah).

These findings corroborated Chrislip and Larson's description of collaborative leaders, who had a clear vision and a commitment to the process, which the leaders safeguarded. Leaders also facilitated interaction, dealt with high levels of frustration, and shared ownership of activities and issues within the process. The process was defined as the strategies implemented to achieve the common goal.

The safeguarding that site facilitators did and the interaction they facilitated, occurred within the triad model by keeping the communication flowing between all triad members, by advocating for the student when necessary, and by completing the administrative duties, such as student registration and resource acquisition. Frustration arose when the technology developed a 'glitch,' for example, incompatibility of software, phone lines being down, or the server shutting down. All of these problems were solved, however frustration arose on behalf of all triad members during these times. "Patience," "commitment," (Sarah) and resiliency were skills needed by site facilitators to deal with the above frustrations.

Sharing ownership of procedural issues (Chrislip and Larson, p.93), for instance, deciding meeting times and attendance, or meeting agenda content, were secured by the organizational structure of the NDDL project, using the communication framework that was already in place. There was a concern however, in terms of providing input or information to the NDDL project by site facilitators.

Sharing ownership also meant being able to share ideas, providing information and asking questions. Furthermore, ownership also supported the concept of accountability. A concern, noted by the researcher, was that site facilitators felt no accountability to the NDDL project. The participants also gave indications that they felt they had few opportunities to provide input into the NDDL project. This was a concern, especially when the site facilitator provided the face-to-face communication with the students, and also had information to offer. If the site facilitator felt that the information they had was not wanted, then change and progress would be slow in response to students' needs, for site facilitators would then be reluctant to offer the information freely.

The NDDL project was an example of collaborative leadership, with respect to meeting the terms of the definition and criteria identifying collaboration. The site facilitator was a collaborative leader at the school site, displaying commitment to the project and to the process of collaboration.

There was a concern, however, on the part of the NDDL project with respect to ownership, accountability and input

by site facilitators. If the goal and vision of the NDDL project was to offer mediated delivery of distance education courses, then the site facilitator was in the best position to gather and provide the information on how well the program was meeting the students' needs and where there was room for improvement. With respect to ownership and accountability, at the time of this study, site facilitators were not held accountable to the NDDL project. If the NDDL project was to continue to be a success, then accountability for site facilitators needed to be established.

Implications for Distance Education

Implications for distance education focus around the following topics: communication, roles and responsibilities, skills and training, and accountability, because participants indicated that within these topic changes to improve the NDDL project could be readily implemented.

Communication

Study participants indicted that communication was a primary responsibility and required skill of all site facilitators in the NDDL project. Site facilitators, mentors, school districts, and the NDDL administration must strive to ensure the integrity of the computer connections since the NDDL courses are very much dependent on the computer technology, particularly in terms of students communicating with mentors. For the demand placed on communication software, connectivity must be stable and able to handle the requirements placed upon it. To ensure the integrity of the connections, one recommendation is that school districts and schools provide adequate time to school district technical

support personnel to solve problems as they arise, in addition to training site facilitators in troubleshooting hardware and software in an effort to reduce the amount of down-time in communication between the students and the mentors.

The acquisition and implementation of videoconferencing technology would greatly enhance communication between students and mentors, as well as site facilitators and mentors. There is always a desire or a need, on behalf of the students and mentors, to 'see' the other person. Videoconferencing can recreate the face-to-face communication. However, because of the costs involved with videoconferencing, regular communication via videoconferencing will continue to be a future goal for school districts.

Roles and Responsibilities

A recommendation for distance education is to reexamine and align the roles and responsibilities of site facilitators outlined by the NDDL project administration, with those reported in this study. The alignment will ensure that required tasks will be accomplished, as well as diminish the uncertainty of who is responsible for which task or duty. Furthermore, an examination of the roles of mentors is suggested to determine if there are overlapping roles and responsibilities. Again, the alignment of responsibilities will ease the uncertainty of determining who is responsible for what task.

An explanation of the organizational structure, including the chain of command with respect to roles,

responsibilities and decision-making authority, should be discussed with all individuals working within the NDDL project. Moreover, a discussion of the policies and procedures will assist, not only site facilitators, but mentors and all other NDDL participants, in carrying out their roles and responsibilities correctly and efficiently.

The participants have indicated that the time allotted to them to fulfil the expectations of the site facilitator role was not adequate. Many participants mentioned that they were completing site facilitator responsibilities on their own time, or at the expense of other students when problems occurred outside the site facilitation time when the site facilitator was teaching another class. To address this problem, an increase of the time allotted to site facilitation, or building some flexibility into the site facilitator's work schedule is recommended.

The development of a site facilitator selection process will require the participation of current site facilitators, the NDDL project administration, and participating school districts. The rationale for this recommendation is that if site facilitators are a key element in the triad, then attention should be given to the process of selecting suitable candidates for the position of site facilitator. One study participant made the comment that "not everybody can do this kind of work" (Zoe).

The selection process should include a set of guidelines to assist school administrators. The guidelines may also be used as a means of evaluating site facilitators and their ability to perform their roles and responsibilities.

The new, identified role of student advocacy requires the skills of mediation and negotiation. NDDL administrators should provide training in negotiation and mediation as part of communication skills training.

Skills and training.

Implications for skills and training pertain to training site facilitators in technology. It is not feasible or practical to bring together all site facilitators to one location and offer training workshops throughout the year. A suggestion, offered by a study participant, is to train the site facilitators at a distance. In other words, turn the site facilitators into students and train them on the technology by using the technology. Training includes knowledge and use of hardware and software, troubleshooting, and computer conferencing. For example, learning and practicing the FirstClass server can be achieved by holding an audio conference with a group of site facilitators and a mentor or a person trained in the particular technology. It would then be possible to teach the site facilitators the use the various functions of the program.

Also recommended is developing a series of training programs that would be offered throughout the year to site facilitators and students, in an effort to build the confidence and skills required in the distance learning environment.

Finally, with respect to the site facilitator selection process, a recommendation is to develop selection criteria and an evaluation process for site facilitators, that includes accountability as an evaluation criteria.

Recommendations for Further Research

This study focussed specifically on the roles and responsibilities of site facilitators in the NDDL project. The necessity of the site facilitator as a member of the triad learning model was supported by the data provided by the participants. Taking into consideration the implications of this study and the study findings, further research is recommended in the areas of triad roles and responsibilities, including an exploration of the developing relationships, as well as the topics of collaborative leadership and accountability.

Triad Roles and Responsibilities

The site facilitator is only one member of the triad, and this study examined the roles and responsibilities from only the site facilitator's perspective. Further research is recommended in determining the roles and responsibilities of teacher-mentors. Furthermore, identifying teacher-mentor activities from the students' perspectives will further clarify teacher-mentor roles and responsibilities. This will provide an opportunity for a two-way comparison among the roles and responsibilities of teacher-mentors, site facilitators and the students. The comparison of roles and responsibilities will also identify overlapping roles and those that are not being performed.

Triad relationships.

Equally important in a triad is the development of relationships. Further research is recommended in the examination of how site facilitators build a relationship with school-based students, as well as home-based students.

An exploration of how mentors establish relationships with students would be beneficial, because mentors are in a unique position of teaching courses at a distance.

Collaborative Leadership

Further research is recommended in exploring the leadership model of the NDDL project. It is important to identify all the stakeholders and potential stakeholders of the project and also to identify each stakeholder's contribution to the project. As the data showed, many individuals and groups were linked directly and indirectly to the NDDL project. Their participation helped ensure the success of the project.

Accountability

A review of literature uncovered no information pertaining to site facilitator or tutor accountability. Accountability, for this study, was based on the dictionary definition of accountable: "subject to the obligation to report or justify something; responsible; answerable" (Random House Webster's Dictionary, 1997, p.9).

Interview data revealed that site facilitators were accountable to their immediate supervisor or the school principal. The explanation was that site facilitators did not have employment contracts with the NDDL project.

According to the data, eight of nine participants felt that they were not accountable to the NDDL project. However, one participant felt an ethical accountability to NDDL.

The majority of the participants, seven out of nine, thought that there should be a system of accountability on the part of the site facilitator, which would ensure the

exploration of NDDL project options available to students; resolve onsite problems; select the right person for the role of site facilitator; and secure the structure and functions of the triad.

Recommendations for further research begin with determining if accountability, on behalf of the site facilitator is required. It must also be determined who requires the accountability. This can be ascertained by examining the feedback received from triad members, Distance Education Schools, and parents. It is also recommended to determine if there is a link between the accountability of the site facilitator and the teacher-mentor, and the success of the NDDL school site.

If accountability is required, further recommendations are to determine the structure of accountability, in other words, what information is required and what tasks need to be completed. Also, it would be necessary to determine a way in which accountability could be secured. This task has implications for the employment contracts with the school districts, in terms of teaching or administrative duties and allotment of site facilitation time.

Summary

The goal of this study was to understand the roles and responsibilities of site facilitators as vital members of the triad, to determine with whom they communicated, and to identify with whom they built relationships.

The data showed that site facilitator roles and responsibilities included technology, communication, instruction, encouragement, monitoring, and administration. A

new role for the site facilitator, not found in the literature, was student advocacy. This role emerged as a result of the site facilitator being onsite with the student and developing a relationship with the student.

Site facilitator training, according to participants, touched on all of the above roles and responsibilities. However, participants strongly supported the need for facilitation training, or how to be a site facilitator, and training in mediation and negotiation skills in response to the student advocate role. No references were found in the literature that pertained to facilitation, mediation, and negotiation training.

Site facilitator networks consisted of communication links with students, teacher-mentors, school principals, and NDDL project administration. Whether these communication links were within or outside the site facilitator's working environment did not matter, for the attitude conveyed by study participants was that they communicated with anyone and everyone that ensured a successful school site and the success of their NDDL students.

The relationships site facilitators established were grounded in the objective and the success of the school site and the students. Site facilitators established relationships with the same individuals and groups in their networks. The data provided evidence supporting Stohl's concepts of networking and relationship building, in addition to Chrislip and Larson's collaborative leadership concept of information sharing among stakeholders.

The data collected for this study has shown that indeed

the site facilitator was a communication bridge, fulfilling roles and responsibilities that ensured communication between the mentor and the student, and that ensured the success of the student in the NDDL project, in part by crossing boundaries, that is by creating links and relationships with those individuals who could help ensure the success of the NDDL site. What the data also revealed was that in addition to the roles and responsibilities that closely mirror those of tutors, site facilitators fulfil the unique role of student advocate. This role is a direct development of the proximity of the site facilitator to the student.

Furthermore, site facilitators, particularly the participants, embodied the commitment and energy necessary to ensure the success of the project. Many dedicated hours were given to students and to the project by the participants in an effort to satisfy their own understanding and definition of NDDL project and student success.

To further secure the success of the NDDL project, study participants strongly supported site facilitator training in site facilitation, mediation, negotiation, and technology. They also concurred with the development of a site facilitator selection process, that would assist NDDL administration and school administrators with the selection of an individual that embodies the qualities and requirements necessary for site facilitation.

The topic of accountability requires further exploration, for it raises questions related to responsibility and policy. Currently, site facilitators in the NDDL project are accountable to the school administration

or to the school district administration, and not to the NDDL project.

Lewis (1981) stated that the site facilitator was a bridge between the student and the tutor. The findings of this study have not only supported Lewis' statement, but have shown that site facilitators are a necessary link to students, teacher-mentors and to all individuals who have an interest, a question, a comment, or a suggestion for the NDDL project.

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Appendix A

Invitation to Participate

you

are respectfully requested to participate in a *"once in a lifetime, never to be repeated"* research study that will place you, the site facilitator, in "the lime light". The study will explore how you, as the site facilitator, are the "pulse" of the NDDL Triad, keeping the students on the tried and true path to success!

This study consists of 1 email survey of approximately 13 questions and 2 telephone interviews(1 interview in November and 1 interview in March). In total, I am requesting approximately 2-3 hours of your time between now and April 15th, 1998. As an educator teaching in Terrace and as a former site facilitator, I am aware of the time you dedicate to your work and to the Project.

All communication of this research will be kept confidential. The Open Learning Agency is aware of and supports this study. A token of appreciation will be sent to every research study participant.

If you are interested in participating or if you have questions related to this study, please contact me through the FirstClass server or through email (iries@kermode.net) or telephone me at 250-635-8157.

I look forward to working with you.

Isabel Ries
(University of San Diego / San Diego State University)

Appendix B

Consent Form

University of San Diego

CONSENT TO PARTICIPATE IN RESEARCH STUDY

Isabel Ries is conducting a research study on **The Role of Site Facilitators in the New Directions in Distance Learning Project.** Since I have been selected to participate in this study, I understand that I will be a research participant.

My participation in the study will include the completion of a demographic survey and two separate interviews, lasting approximately 40 to 50 minutes each. Participation in this study should not involve any added risks or discomforts to me except for minor fatigue.

My participation in this study is entirely voluntary. I understand that I may refuse to participate or withdraw at any time without jeopardy to myself. I understand that I am welcome to delete or revise any part of the transcript of my interviews.

I understand that all information I provide to this study will be kept in a secure location and my identity will be masked so I will not be identified if the data is viewed by others. My identity will not be disclosed without consent required by law. I understand that my school and school district will be concealed.

Isabel Ries has explained the study to me and has answered my questions. If I have further questions or research-related problems, I can reach Isabel at **(250) 635-8157** (phone and fax) or by email at **iries@cmsd.bc.ca**.

There are no other agreements, written or verbal, related to this study beyond that expressed on this consent form.

I, the undersigned, understand the above explanations, and on that basis, I give consent to my voluntary participation in this research.

_____ _____

Email address of Participant Date sent

_____ _____

Email address of Researcher Date received

Appendix C

Demographic Questionnaire

To: STUDY PARTICIPANTS
From: iries@cmsd.bc.ca
Subject: Site facilitator questionnaire

Thank you for helping me in this project. As a former site facilitator, I know that you are very busy filling out registration forms, checking hardware and software and worrying whether the students' course materials will arrive before the end of the semester. I would like to ask you for some of your time and input about what you think is the role of a site facilitator.

Information you provide will be kept confidential. Please answer as many questions as possible. I am asking that the survey be completed within 2 weeks. Copy the survey into an email message form. Please use the header: SF survey.

Thank-you for your response and participation, I look forward to working with you.

Isabel Ries iries@cmsd.bc.ca
Researcher 250-635-8157

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SITE FACILITATOR SURVEY
School Site:

1. Location of the school: Urban Rural

1a. If a rural school, how far is it to the nearest urban center?

Correspondence Courses:

2. How many students are enrolled in NDDL classes?

3. Why are these students completing courses by NDDL?

4. How many NDDL classes are running, and how many students are enrolled in each NDDL course.
For example:
Data Processing 11 3 students

Technology:

5. List the most commonly used hardware and software that is used in the NDDL courses.

6. What kinds of technical problems have you encountered in the NDDL Project?

7. The NDDL Project requires a technician be assigned and available to the school site to handle and take care of hardware and software problems.

8. How accessible is the technician when he / she is needed?

9. How long does it take to fix a hardware or software problem?

10. Who other than NDDL registered students have access and use of the technology and software?

Any comments you wish to make:

==========

Thank-you for completing this survey. I will confirm receipt of the survey and at the same time ask for a date and time, in October, that you and I could have a telephone interview. The length of the interview should be approximately 40 to 50 minutes. Feel free to contact me at any time if you have questions or concerns.

Appendix D

Guiding Interview Questions

Background Information / Establishing Rapport:

- What position do you hold in your school?
- How were you chosen to be a site facilitator?
- How many years have you been a site facilitator? Have you ever been a teacher-mentor?
- Have you received any training as a site facilitator from the NDDL Schools Program? Can you describe the type of training you have received?
- How much time is dedicated to the NDDL Project per week?

Research Question #1: What are the roles of site facilitators?

- How would you describe your role as a site facilitator?
- Who are you accountable to?
- What kinds of skills are necessary for a successful site facilitator?
- What kind of training is necessary for a site facilitator?
- Do you ever go above and beyond what is stated and expected?

Research Question #2: What internal factors affect the success of the NDDL Project?

- Who do you communicate with? And explain why.
- What would make the program more successful?

Research Question #3: What external factors impact the success of the NDDL Project?

- Outside of the school environment, who do you communicate with?

Research Question #4: What relationships are maintained or created by the site facilitator?

- Who do you think you should maintain communication with to ensure the success of the NDDL Project? Could you please explain why?
- Who do build a relationship with to ensure the success of the NDDL site?

Questions regarding the future of site facilitators:

- How would you like to see the role of the site facilitator change in the future?

End of Interview Questions:

- Is there anything else about being a site facilitator that I would need to know?
- Do you like being a site facilitator? Could you explain to me why?

Appendix E

Distance Education Schools.

Contacts in Education, Skills and Training. (1997) .

URL:http://www.est.gov.bc.ca/comm/conined/distance.htm

Central Interior Distance Education School
for districts: 27, 28, 49, 55, 56, 57
Bag 7400
1788 Diefenbaker Avenue
Prince George, BC V2N 4V7
Tel: 563-1818, Fax: 563-1150
Toll Free: 1-800-661-9717 or 1-800-661-7515
Principal: George Harris

Distance Education School of the Kootenays
for districts: 1, 2, 3, 4, 7, 9, 10, 11, 12, 13, 18, 86
570 Johnstone Road, R.R. #1
Nelson, BC V1L 5P4
Tel: 354-4311, Fax: 354-6629
Toll Free: 1-800-663-4614
Principal: Robert McLure

Fraser Valley Distance Education School
for districts: 32, 33, 34, 35, 36, 42, 43, 75, 76
49520 Prairie Central Road
Chilliwack, BC V2P 6H3
Tel: 794-7310, Fax: 795-8480
Toll Free: 1-800-663-3381
Principal: Marie Yelich (until July 31), Peter Brown (as of Aug 1)

Greater Vancouver Distance Education School
for districts: 37, 38, 39, 40, 41, 44, 45, 46, 48
530 East 41st Avenue
Vancouver, BC V5W 1P3
Tel: 660-7947, Fax: 660-5042
Toll Free: 1-800-663-7867
Principal: Judy Dallas

North Coast Distance Education School
for districts: 50, 52, 54, 80, 88, 92
Bag 5000
3211 Kenney Street
Terrace BC V8G 5K2
Tel: 635-7944, Fax: 638-3649
Toll Free: 1-800-663-3865
Principal: Joe Vander Kwaak

Northern BC Distance Education School
for districts: 59, 60, 81, 87, Yukon
10704 - 97 Avenue
Fort St. John, BC V1J 6L7
Tel: 785-1335 (elementary), Tel: 785-1333 (secondary)
Toll Free: 1-800-663-9511, Fax: 785-1188
Principal: Chuck Froese

North Island Distance Education School
for districts: 47, 68, 69, 70, 71, 72, 84, 85
2080 Wallace Avenue
Comox, BC V9M 1W9
Tel: 339-6110, Fax: 339-5555
Toll Free: 1-800-663-7925
Principal: Phil Caswell

Okanagan Distance Education School
districts: 14, 15, 16, 17, 19, 21, 22, 23, 24, 26, 29, 30, 31, 77, 89
Bag 4700
2475 Merritt Avenue
Merritt, BC V0K 2B0
Tel: 378-4245, Fax: 378-1447
Toll Free: 1-800-663-3536
Principal: Paul Montgomery

South Island Distance Education School
for districts: 61, 62, 63, 64, 65, 66, Saskatchewan
4575 Wilkinson Road
Victoria, BC V8Z 7E8
Tel: 479-6839, Fax: 479-9870
Principal: Greg Bunyan

Appendix F

Reasons Students Register in Correspondence Courses

Questionnaire question #2a: Why are students completing these courses by correspondence? Please list.

Students completed courses by correspondence because they:

- were disenchanted with the public system;
- preferred more independence and self-direction;
- did not meet with academic success in the public system (ex. pace is too fast or too slow);
- did not meet the rules and regulations of the public system (ex. attendance, behavior);
- travelled, or were ill;
- worked or pursued specialized training (athletics, acting, music);
- were adults returning to complete interrupted education;
- were students or families seeking flexible alternatives;
- began as a home-schooler;
- arrived partly through a correspondence course and stay in the correspondence course until they have finished it;
- participated in a pilot project not available at school; and
- were registered in correspondence courses which was their regular way of taking courses.

Appendix G

NDDL Courses and Student Enrolment

Questionnaire question #4: How many NDDL classes are running, and how many students are enrolled in each course.

Course	Number of Students
Math 10	5
Biology 11	4
CAPP 11	5
Chemistry 11	2
Data Processing 11	5
Environmental Science 11	3
Intro Math 11	2
Information Technology 11	5
Math 11	1
Physics 11	1
Social Studies 11	7
Art 12	1
Biology 12	1
Calculus 12	2
CAPP 12	2
Chemistry 12	1
Data Processing 12	1
English 12	6
English Literature 12	4
Entrepreneurship 12	3
First Nations 12	2
History 12	1
Journalism 12	1
Law 12	2

Multimedia	1
Physics 12	4
Writing 12	5

Appendix H

Reasons Students Register in NDDL Courses

Questionnaire question #3a: Why are these students completing courses by NDDL?

Students registered in an NDDL course because:

- the course was not offered in school;
- they wanted to graduate early;
- they loved the environment, or the student enjoyed working with the technology;
- they were successful in previous NDDL courses;
- the NDDL course reduced the sense of isolation;
- they wanted to use computers to do their courses;
- the course was not offered in the "regular" correspondence system;
- they experienced timetable conflicts;
- the course was required for vocational upgrading;
- they preferred the support of the mentor;
- they liked the interaction with other students;
- they were looking for alternatives to the traditional correspondence model;
- their parents were looking for alternatives that allowed them access to subject area specialists while still being able to complete their schooling from home.

Appendix I

Smilies

Robert.Andersson@cling.gu.se Last modified:
Tue Sep 30, 1997

:-)	The most common smiley used to show ones joy over a funny remark just made. A surfer wants to share his cheerful state of mind.
;-)	A flirting surfer or he wants to emphasize a sarcastic statement made.
:->	Surfer wrote a great nasty sarcastic sentence.
>:->	This time the surfer is feeling diabolic.
:-I	The indifferent smiley, somewhere in between the frowning and the happy smiley.
:-(	Frowning, when the surfer is feeling somewhat gloomy.
>;->	Now you've done it! A mutant smiley, devilish and flirting at the same time.
:)	Oh, gosh! I feel so happy today.
;)	Twinkle, twinkle little smiley...
:]	Friendly little fellow, who desperately is searching for a friend. This one is also called "the fast food employee smiley."
:}	Burp! More beer for students!
>;)	The little devil gives you the eye.
:(	A little bit sad or is feeling somewhat gloomy.
:[	I just feel so depressed.
:B	Carries interpretation: A nerd (hmmm... aren't we all?)
:o	Wow!!!
:O	Yelling!
[]	Hugs and...
:*	Kisses!

Appendix J

Verb List from Interviews and *NDDL Learning Guides*

The first list contains verbs that are common to both the *Learning Guides* and the study participants. They are

ensure;	provide;	maintain;
work;	motivate;	assist;
problem-solve;	solve;	monitor.

The second list contains the verbs found in the *Learning Guides* of the NDDL Project, not mentioned by the study participants:

counsel;	evaluate;	celebrate;
review;	solve;	involve;
explain;	guide;	warn;
help;	hold;	wrap up;
become familiar;	train.	

The third list of action words are unique to the study participants:

track down;	send;	sit in;
keep track;	answer;	act as;
check;	present;	help;
register;	pass on;	empower;
advocate;	make contact;	photocopy;
mediate;	interact;	go through;
run interference;	initiate;	set up;
negotiate;	facilitate;	ship;
intercede;	teach;	invigilate;
encourage;	communicate;	teach;
support;	be part of;	channel;
information;	push;	get along.

Appendix K

NDDL Commitments

The following excerpts outline the commitments school districts must meet in order to participate in the NDDL project.

Technology Commitments

All NDDL sites require a designated space, for NDDL activities, which is equipped with:

- computers on a local-area network (LAN)
- a voice-quality telephone line
- LAN data connection to the provincial wide-area network (WAN)
- computer peripherals includeing a laser printer, graphics tablet, desktop scanner, and speaker phone.

Personnel Commitments

NDDL sites must have a designated teacfher-facilitator.... The minimum staff time equivalent to 0.125 FTE is required for duties which may include informatl counselling, technical set up and training, student support, and liaison with NDDL staff.

Training Commitments

In order to ensure a successful implementation for NDDL in yhour district and at yhour site, attendance at the three day training session, NDDL Camp, is crucial for your teacher-facilitator and of interest to your site administration and technical staff.

Technical Support Commitments

District technical support is needed to make NDDL a success at your site. A district technical support person will provide ongoing network support and assist with the installation and maintenance of the NDDL site equipment.

District Commitment Form

A commitment form signed by a district signing authority is required of all sites applying to participate in the NDDL program.

Open School. (1998). District and site commitments. Webpage URL: www.openschool.bc.ca/nddl/about/commitments.html.