

2001

Experiences of female students completing a full-time aboriginal program by computer-mediated communication

Johnston, Theresa Lorraine

<http://knowledgecommons.lakeheadu.ca/handle/2453/4002>

Downloaded from Lakehead University, Knowledge Commons

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI[®]

**Experiences of Female Students
Completing A Full-Time Aboriginal Program by
Computer-Mediated Communication**

Theresa L. Johnston

**A Thesis
Submitted in Partial Fulfilment of the Requirements
for the Degree of
Master of Education**

**Faculty of Education
Lakehead University
Thunder Bay, Ontario**

May 2001

© 2001 Theresa L. Johnston



**National Library
of Canada**

**Acquisitions and
Bibliographic Services**

**395 Wellington Street
Ottawa ON K1A 0N4
Canada**

**Bibliothèque nationale
du Canada**

**Acquisitions et
services bibliographiques**

**395, rue Wellington
Ottawa ON K1A 0N4
Canada**

Your file Votre référence

Our file Notre référence

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

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

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

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

0-612-60851-4

Canada

ABSTRACT

This naturalistic inquiry examines the experiences of female Aboriginal students who were completing a full-time college program by computer-mediated communication (CMC). The college program was designed for the preparation of Aboriginal Teacher Assistants. The background literature examines the work of previous scholars on listening to women's voices, connected learning, appropriate technology for Aboriginal learners and the use of computer-mediated communication in meeting learners' needs. Eight students volunteered to participate in the study. Two were lost through attrition.

Data were collected through two sets of face-to-face interviews, one set of telephone interviews, field notes and observation of online messages posted by the participants. Participant profiles were created from the participants' own words, and the data were analysed for emergent themes. Three themes were identified. These included demographics, prior educational experiences and learning preferences.

The analyses of the interrelationships resulted in the identification of barriers to positive post secondary educational learning experiences and to the participants' concepts of themselves as learners. The participants' experiences in the Aboriginal Teacher Assistant Program were then examined in relationship to these barriers.

The participants' successfully completed this full-time college program and reported positive experiences in doing so. Through the analyses of their experiences, factors that led to the participants' success were identified. It was determined that for these women to be successful, not only must education must be community-based, flexible, and holistic but also foster and nurture relationships between and among students and instructor. These factors were supported by the CMC method of delivery.

Implications include providing (1) appropriate technologies, (2) multiple ways of connecting and interacting and (3) face-to-face components when delivering Aboriginal programs to women at a distance. It also is important that we identify the characteristics of teachers who are respectful to Aboriginal values and who are successful in creating interpersonal connectedness through computer-mediated communicative alternatives.

ACKNOWLEDGEMENTS

My first acknowledgement must be extended to the six women who trusted me to tell their story. The contributions and insights provided by these women increased my understanding and awareness of what it means to be a student taking a full-time college program by CMC while juggling the demands of home and work.

I would like to thank Dr. McLeod for agreeing to be my advisor. His patience and timely feedback allowed me to complete this thesis on time. Dr. Fennell, as second reader, provided helpful suggestions for the final draft. I also would like to thank the internal reader, Dr. Scott, and the external reader, Dr. Robinson, for acknowledging my efforts in completing this study and for their constructive feedback.

I would like to thank Cathy Tysz for creating and making the many revisions to my diagrams. My friend Lynn Osterman deserves a medal. She listened, proofread and provided constructive feedback every step of the way. I could not have done this without her help and encouragement. My family, Jeff, Teri and Robyn, have supported me through this journey with extreme patience and understanding.

TABLE OF CONTENTS

Abstract	iv
Acknowledgements	v
Table of Contents	vi

CHAPTER I INTRODUCTORY BACKGROUND OF THE STUDY

Introduction.....	1
Research Question	1
Rationale	1
Key Terms for the Study.....	2
Description of the Program.....	4
Personal Ground.....	10
A Personal Declaration	11
Overview of the Research Process.....	13
Overview of the Study	14

CHAPTER II SELECTED BACKGROUND LITERATURE

Introduction.....	16
Appropriate technologies for Aboriginal Learners	16
Computer-mediated delivery Methods	19
Connected Teaching and Learning	22

CHAPTER III THE RESEARCH METHODOLOGY

Introduction.....	24
Ethical Issues	24
Provisions for Trustworthiness	25
Participant Selection	25
Data Collection	26
The Initial Interview	26
The Second Interview	28
The Final Interview.....	30
Field Notes	32
Daily Log	34
Samples of Messages	36
Data Processing and Initial Analyses.....	39

CHAPTER IV PARTICIPANT PROFILES AND DATA ANALYSES

Introduction.....	42
Participant Profiles.....	42
Profile of Elaine	43
Profile of Marnie.....	48
Profile of Joanne	53
Profile of Tracy	58
Profile of Natalie.....	61
Profile of Jennie	66
Summary	69
Analysing the Data by Themes	69
Demographics	70
Prior Education	71
Learning Preferences.....	72
Experiences in the Teacher Assistant Aboriginal Program	76
Delivery Method and Program.....	76
Challenges.....	78
Frustrations	78
Relationships.....	79
Summary	80

CHAPTER V INTERPRETATION

Introduction.....	81
Demographics and Prior Education	81
Prior Education and Learning Preferences.....	84
Demographics and Learning Preferences.....	85
Thematic Interrelationships and Emergent Barriers	87
Interpretation Related to the Literature.....	88
Community-based	88
Flexibility	89
Holistic and Respected Aboriginal Values	91
Relationships.....	92
Summary	93

CHAPTER VI SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

Introduction.....	95
Summary	95
Implications.....	97
Recommendations for Further Studies.....	99

REFERENCES101

APPENDICES104

Appendix A Letter to Prospective Participants.....105

Appendix B Volunteer Response Form106

Appendix C Participant Consent Form107

Appendix D Guiding Questions.....108

LIST OF FIGURES

Figure 1. Time Line of Aboriginal Teacher Assistant Program	6
Figure 2. Interrelationships of Themes	82

CHAPTER I

INTRODUCTORY BACKGROUND OF THE STUDY

Introduction

This naturalistic research study documents the experiences of six women who were completing a full-time Aboriginal Teacher Assistant Program by means of computer-mediated communication (CMC). Women were the focus of this study since they have been the primary users of this particular college program. The innovative program will be described and the reactions and experiences of students enrolled in the program will be explored. Six students from the program will explain in their own words who they are, how they learn, and what their learning experiences with CMC have been.

Research Question

What do the experiences of female students completing a full-time Aboriginal program by computer-mediated communication reveal about the usefulness and appropriateness of such instructional methods?

Rationale

Spronk (1995) used a case study approach to examine appropriate learning technologies for Aboriginal learners. She analysed the success of courses delivered using print material, audio conferencing, on-site delivery and combinations of the above; however, she did not consider computer-mediated communication. Other researchers who have considered CMC as a means of delivery have not considered the unique situations or

needs of Aboriginal learners, nor have they considered entire programs when doing their research. Harasim, Hiltz, Teles, and Turoff (1995) have documented the advantages of CMC over other methods of distance delivery. Burge (1993) studied graduate students taking individual courses by CMC. Although Aboriginal students are often the subject of studies and reports, these studies do not allow the students to tell their own stories. It is the purpose of this study to allow the participants to tell their own stories about their learning experiences in taking this full-time college program by CMC. The key terms for this study are defined in the following section.

Key Terms for the Study

The key terms for this study include qualitative research, Aboriginal, computer-mediated-communication (CMC), bulletin board system, off-line computer program, full-time program, and connectedness.

Qualitative research in this study refers to the study of people in natural settings.

Data are collected by interviews and observations and generate thick description using direct quotations to capture the participants' personal perspectives and experiences.

(Patton 1990)

Aboriginal includes any member of the population with Aboriginal ancestry and will include both status and non-status Indians who are defined as such in the Indian Act of Canada.

Computer-mediated communication (CMC) refers to a variety of means of communicating by use of the computer including text, audio and visuals. In this study, it

refers to computer conferencing which allows messages to be composed, stored, delivered and received. These messages can be opened by all members of a conference.

Bulletin board system in this study refers to a simple method of computer - mediated communication using a basic text-based series of conferences which allows participants of the conferences (in this case, students and instructor of the program) to compose, save, post and receive messages.

Off-line program in this study refers to a computer program which allows messages to be written, read and stored while not being connected via the telephone to the main computer server.

A full-time program in this study refers to a ten-month college certificate program consisting of fourteen individual courses plus a field placement component resulting in a total of 1062 credit hours for the program.

Connectedness in this study is a reference to a feeling of belonging. The term has been used by Belenky to describe what she calls 'connected teaching' through which educators help women develop their own authentic voices by emphasising connection over separation, understanding and acceptance over assessment, and collaboration over debate. There is a respect for knowledge that emerges from firsthand experience. Students are encouraged to evolve their own patterns of work based on problems they are pursuing (Belenky, Clinchy, Goldberger, & Tarule 1986). Connectedness refers to a connection not only with the teacher and other students, but also with family and community which results in a sense of belonging and wholeness.

Description of the Program

This ten-month Aboriginal Teacher Assistant Program (ATA Program) was culturally sensitive in its content and innovative in the method of distance delivery. The program was developed to meet the needs of northern Aboriginal communities that required trained teacher assistants to work in their local schools. The candidates for this program often already were employed in the schools and working as assistants, and most had many commitments and ties to the community. Leaving the community to take a college program on campus and away from home was not an option for these students. Therefore, this special ten-month program was designed by a northern Ontario college in 1993 to meet the needs of Aboriginal learners in Northwestern Ontario.

The program consisted of fourteen courses and a field placement component. It had a combination of face-to-face sessions and distance delivery methods. Although the program originally had been delivered using distance delivery methods of printed course packages enhanced by weekly teleconferences for each course, it was found that this method interrupted the students' placement and employment to attend the teleconferences. This delivery also had the disadvantage of being synchronous; everyone had to be available at the same time to attend and take part in the scheduled teleconferences. The students enrolled in this program had many roles as spouses, parents, community members, and employees. They were not always able to attend the scheduled conferences resulting in missed classes and missed opportunities for learning.

In 1997, the Aboriginal Teacher Assistant Program continued to be delivered using mixed delivery methods but took advantage of a computer bulletin board system.

The delivery of the program included a face-to-face session at the beginning and at the end of the program, printed course packages, use of a computer bulletin board system along with a variety of means incorporated by the teacher and students including use of the telephone, facsimile machine, and even a local air carrier to deliver completed assignments to the teacher.

Figure 1 has been included to provide a time line for the ten-month Aboriginal Teacher Assistant Program delivered by CMC. The top portion of the figure describes the program the students were following and where they were studying. The bottom portion identifies the types of data gathering and when they occurred. This is described in detail in chapter three.

The delivery of the program continued to have an initial two-week session where the students met face to face for an orientation and an introduction to the program. Since the college instructor, the students and the computer technical support staff all were from different communities, a geographically central location was chosen for this initial orientation. The orientation session was designed to serve multiple purposes:

(1) The students, college instructor and technical staff could all meet and become acquainted; (2) A bonding process could take place which is important to create an environment in which people are willing to share and take risks; (3) Students were introduced to the program expectations and to the course material; (4) Students were trained on the computer bulletin board system. As part of the program, students were loaned computers to use for the duration of the ten-month program. They were taught how to use the bulletin board system and how to set up the computer and modem. They

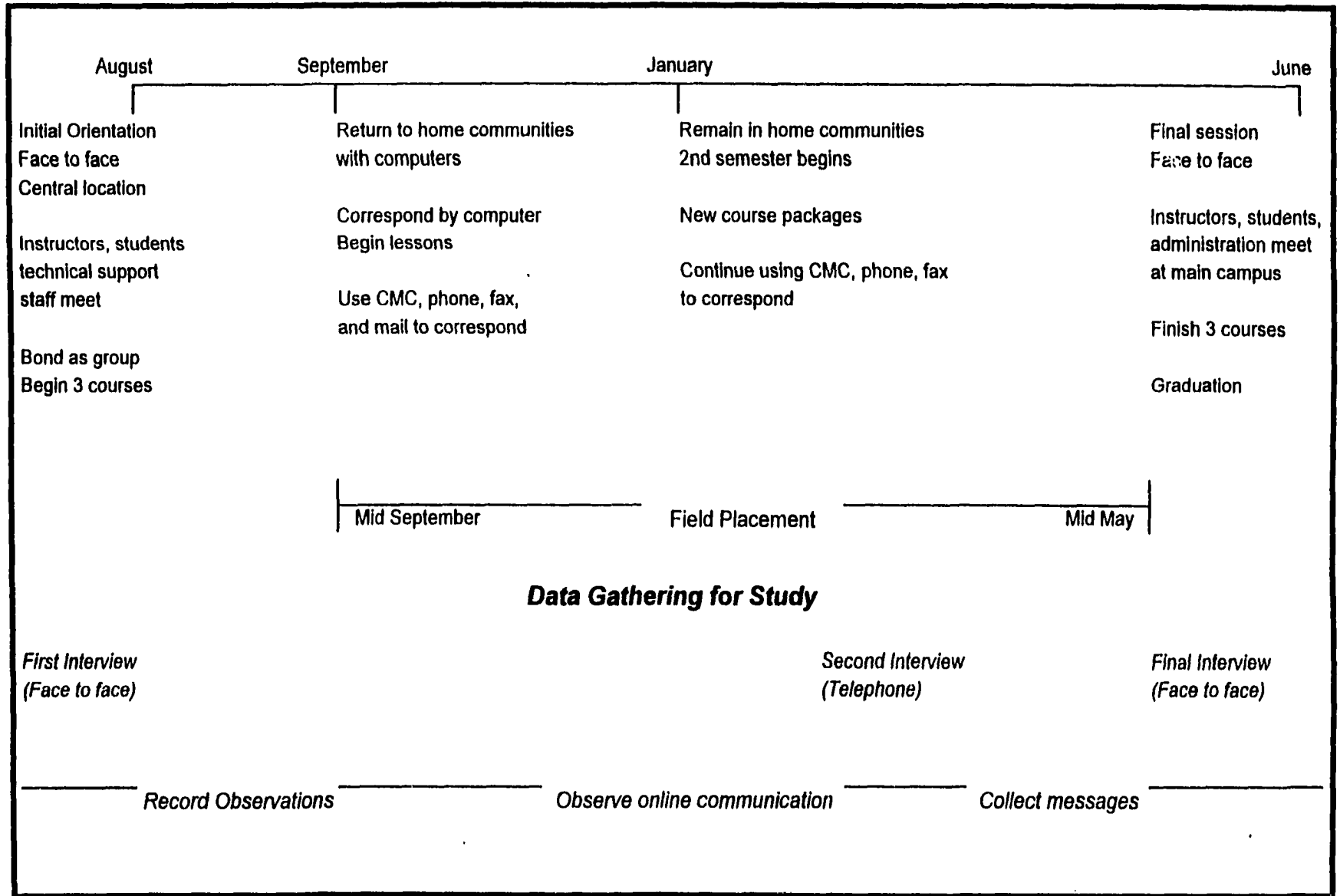


Figure 1: Aboriginal Teacher Assistant Program Delivered by CMC

had an opportunity to practice using the off-line program to write and read messages. This off-line program allowed students to write and post assignments while not having to be connected through the modem to a telephone line. Once all messages were written, students connected via the modem to the telephone line and sent and received their messages. It was important for the students to learn to use this off-line program because telephone lines in their home communities often are unreliable. This off-line program allowed students to spend as much time as they needed to read and write messages, but only required a few seconds of being connected to a telephone line in order to send and receive the messages. Students were expected to become confident and comfortable using the technology during this orientation session.

At the end of the two-week orientation session, the instructor and the students left this satellite campus and returned to their home communities taking their computers with them. The teacher and the students set up their computers which became the primary method of communicating with each other for the next ten months. Some set up the computer in their kitchen or bedroom, while others had to move their computer to a Community Learning Centre where telephone lines were available, and/or more reliable.

Students corresponded with each other and with the instructor by writing their messages in special conferences that were open to only those enrolled in the program. The bulletin board system was set up with three conferences for each course. The three conferences for each course were identified as *Notes*, *Assignments* and *Discussion*. Each of these conferences was identified by a course name and number. (Example: Conference

(82) Child Development - Assignments). Anything written in these conferences was accessible to anyone registered in the class who logged onto the online program.

There also were conferences that served special purposes. There was a conference called *Technical Support* where students could contact the computer technical staff when they had questions or concerns of a technical nature. There was a *Private Conference* where messages could be written in private to any member in the group. This private conference also could be used for any private E-mail to friends and relatives not in this program. There was also a conference called *Coffeeshop* which was set up for socializing with the other students. This was intended as a place where students could talk about their home life, their social lives or anything that would normally be discussed during their coffee break if they were in a college campus setting.

Students received the course packages at the beginning of each semester. The packages were designed by the college in consultation with members of the Aboriginal communities. There was an introduction in each package describing how the content was designed to incorporate the needs of Aboriginal learners. The print packages contained notes on the subject matter and assignments to be completed throughout the duration of the course. These packages included review exercises and places for students to write answers and to make rough copies of their assignments. Completed assignments were uploaded to the bulletin board system and sent off to be received by the other members, and the instructor whenever they logged onto their computer. This asynchronous method allowed students and teacher to post and read messages at any hour of the day.

If at times a computer bulletin board was not working or it did not meet the needs for delivering a message, the telephone was used to connect instructor with students, students with instructor, and students with each other. Although it was not encouraged, it was sometimes more convenient for a student to send an assignment or message using the facsimile machine. This was not encouraged because it denied the other students access to messages, assignments and discussion.

As with many college programs, a field placement component was an integral part of this program. A field placement of this Aboriginal Teacher Assistant Program required students to complete a half-day placement five days a week from September until the middle of May. Students worked as teacher assistants at their local schools. The initial expectation was that students spend the morning in the school and the afternoon working on lessons and assignments; however, the delivery method allowed students to adjust placement hours as the need arose and to complete lessons and assignments at a time that was convenient. Three of the students already were employed as teacher assistants on a part-time or full-time basis. The hours they were spending employed as assistants were counted toward the placement hours. They were able to continue to work, complete their placement credit and take a full-time college certificate program while staying in their home community. This program had advantages for the students and had special meaning for the instructor. In the next section, my personal ground will be described to explain my interest in this program and in doing this particular study.

Personal Ground

We all view the world through the perceptual lenses of our previous experiences and outlook on life. The lenses I will be looking through are coloured and enhanced both by my experience in teaching and my involvement in distance education. I have been an elementary classroom teacher for many years and had experience working in partnership with teacher assistants before accepting a position to teach a two-year Teacher Aide Program at a small regional campus. I taught this program several times and was very familiar with the content and the types of learners who were attracted to this program. Most were women with children who were looking for a change in careers or wanting to return to work once their children were in school. During that time, I was raising two young children, had a husband and home to take care of and also was taking courses to add to my qualifications. Taking an additional qualifications course was my first introduction to learning at a distance. Since that time, I have taken and have taught many courses by distance methods and appreciate the advantages and also the many challenges involved.

I come to this research with a great appreciation for the students. In my time as a college instructor, I have witnessed transformations that take my breath away. I have encountered students who have refused to give up even when the odds and obstacles would have caused most of us to throw up our hands.

My view on distance education reflects those who speak of the increasing blurring of boundaries between the distance and so-called conventional education (Spronk 1995), and observe that it is not distance that is the crux of the matter. Rather, if a safe climate

is established, the connection takes place; if there is a safe place to be heard, to take risks, and to grow, then it does not really matter whether it takes place in a room with four walls on a college campus or at a computer workstation.

I have taught college courses by many of the methods described in the literature on distance education -- audio-conferencing with audio-graphics, two-way video, and at the time of this study, by computer-mediated communication. My experiences have been at regional campuses where the student population is typically female, thirty-some years of age, with dependents. Many of the students are Aboriginal.

I have identified with some, but not all, of the literature on distance delivery. Much has been written about teaching and learning at the graduate level or at least at the university level (Burge & Lenskyj, 1990; Burge, 1993; Harasim, Hiltz, Teles, & Turoff, 1995). It is important to note, that college students usually come with educational backgrounds and levels of success that are different from those of university and especially graduate-level students. We can assume graduate students have proven success in education. College students sometimes have had negative school experiences and do not return until they have gained confidence through life experiences.

I have been privileged in that I have been a distance educator while working collaboratively with Aboriginal communities for three years. I am learning how the world looks through "two pairs of eyes" (Spronk 1995).

A Personal Declaration

It is important to note at this point my role in the delivery of the program and my relationship with the learners who inform this study. I have been the teacher for the

Aboriginal Teacher Assistant Program since it has been delivered using computer-mediated communication as the main method of delivery. I have taught this program to two groups previous to the one being considered in this study. Although this experience had been the driving force behind my interest in this unique delivery method, I was very interested in learning about the experiences of the students from their perspective.

I was privy to many things about the program. I had access to conversations with the students before the beginning of the study. I had access to all of the messages on the bulletin board system and had knowledge of the prior experiences of the students in the previous classes. I spent much time contemplating and reflecting on my role as an educator and my success in delivering a program that reflected my philosophy that learners, especially female learners, need to feel a connection to the program, the teacher and to each other. I had formed impressions about the experiences of the learners; however, I could not and did not know about their experiences from their point of view.

This research study was conducted with the knowledge that there would be issues regarding the two roles I would be playing as teacher and researcher. Students were advised of my study and invited to participate. Participation was completely voluntary. Participants could withdraw at any time. They were informed that care would be taken to ensure that their participation and responses to interview questions would not have an effect on their grades. Care was taken that participants did not receive special treatment just to keep them in the program so they could continue as participants in the study.

Special care was taken in the design of the questions to avoid remarks about my teaching. What was being considered were their learning experiences. Although this dual

role might be considered to have a compromising effect, it also had advantages in allowing me as the researcher to be available to view all interactions that took place on line. I was able to conduct this study and collect data over the entire course of the ten-month program. This would not have been possible without the dual role as teacher and researcher.

Overview of the Research Process

The question, "*What do experiences of female students completing a full-time program by computer-mediated-communication reveal about the usefulness or appropriateness of such instructional methods?*" was addressed using a qualitative research approach. This qualitative approach (Lincoln and Guba, 1985; Patton, 1990; Maykut & Morehouse, 1994) is designed to explore and describe such experiences. The methods used in this study were influenced by Belenky, Clinchy, Goldberger, and Tarule (1986), and included interviews, field notes, and observations. I encountered the use of profiles in a study completed by Fraser (2000) and decided to incorporate participant profiles in my report as a way of allowing the participants' voices to be heard in a holistic manner.

At the outset, eight students volunteered and were chosen for the study. Over the duration of the study, two of the participants left the program, resulting in six participants who took part in the full study. A variety of methods was used to gather data over the ten-month period. There were three interviews with each participant. These were audio-taped. Field notes were recorded during the face-to-face sessions and during the interviews. A

daily log was kept to record online messages, and observations were made and recorded with the field notes. The data were sorted and analysed and considered for emergent themes. Interpretations followed from the analyses and resulted in implications for this method of delivery and recommendations for further study.

Overview of Study

Chapter I Introduction

This introductory chapter provides the purpose and rationale for the study, definitions of key terms and an overview of the study. A description of the program in which the participants were enrolled is included as well as my role as the instructor of the program and an overview of the research process.

Chapter II Review of the Literature

The literature review considers research on appropriate distance delivery technology, advantages and limitations of computer-mediated-communication, the importance of connectedness, as well as literature on techniques for data gathering.

Chapter III Methodology

Ethical considerations and the establishment of trustworthiness are provided in this chapter. The participant selection process, data collection and processing is described in detail.

Chapter IV Participant Profiles and Data Analyses

An explanation of my decision to include participant profiles introduces this chapter. Profiles of the participants are included along with data analyses.

Chapter V Findings and Interpretations

In this chapter, the findings are reported and interpreted.

Chapter VI Summary, Implications and Recommendations

This final chapter summarizes the research study, considers the implications and provides recommendations for further study.

CHAPTER II

SELECTED BACKGROUND LITERATURE

Introduction

A growing body of research on students studying by distance methods has been reported in the literature (Garrison, 1985; Moore, 1986; Sweet, 1989; Paulsen, 1995). The research is now focussing on methods of delivery involving computer technology (Hiltz, 1986; Davie, 1988; Turoff, 1997; Berge & Myers, 2000). The studies often compare distance methods of delivery to traditional classroom methods (Souder, 1993; Ludlow, 1994) and try to answer such questions as: "Which is better?"(Souder, 1993) and "Are students successful?"(Stubbs & Burnham, 1990; Bernt & Bugbee, 1993). The current qualitative study, however, is not designed to compare delivery methods, but rather to report on the experiences of the participants using the CMC delivery method. The following review shows how the literature has shaped the design of the present study.

Appropriate Technologies for Aboriginal Programs

Spronk (1995), a Canadian anthropologist and distance educator, explored methods of distance delivery and determined which methods worked best for Aboriginal learners. She stressed that cultural factors must be considered when delivering education to Aboriginal students and she described five rules or ethics (Brant, 1990) that have guided conduct in traditional times and also have great influence today (Ross, 1992). The five rules or ethics that were originally reported in the literature by Dr. Clare Brant, a Mohawk, and a practising psychiatrist, provided the historical background for Spronk's

research. (1) The ethic of non-interference means children learn on their own by observing constantly and carefully. To traditional Native parents, it means that children will always be around them. This results in difficult choices when it comes to having children leave the community for educational opportunities. (2) The ethic that anger cannot be shown is a survival tactic which results in individuals' sacrificing their own feelings for the good of the group. (3) The ethic of respecting praise and gratitude is demonstrated by asking the person to continue with his or her contribution rather than offering vocal expressions of gratitude. Since doing things incorrectly could have disastrous results for the group, there is a great reluctance to attempt things unless there is a likelihood of success. (4) The conservation-withdrawal tactic requires that an individual carefully observe and mentally walk through the action before attempting it. (5) The notion that time must be right means preparing oneself emotionally and spiritually before choosing a course of action. Many of the rules or values are revealed in when and how language is used. Silences have different meanings for Aboriginals than for non-Aboriginals. These rules or core set of values greatly influence the behaviour of Aboriginal learners and often result in misunderstandings when cultures come together.

In her study, Spronk (1995) studied how seven institutions from across Canada (universities, colleges and Contact North) delivered programs to Aboriginal students by distance methods and explored which methods worked best for the learners. The methods used by the various universities and colleges included independent study or correspondence courses, courses delivered by audio-conference with/or without audio-graphics, on-site delivery where the instructor travels to the community, tutor on-site with

instructor connected by teleconferences, and various combinations of the above. She examined appropriate learning technologies for Aboriginal learners. Spronk found that the home study model did not work. She suggested that considering (1) the learner's heritage, (2) the centrality of the oral traditions, (3) the need for group solidarity, and (4) the kind of "watch, prepare, then do" that ensured survival in earlier times continues to be important today (Spronk, 1995, pp. 91-92).

What does appear to be effective for Aboriginal learners is face-to-face contact with instructors, tutors, counsellors, supervisors, mentors, or other students, and to supplement this contact with self-study print materials (Spronk, 1995). She found that teleconferences not only made the course more meaningful, but also brought the students together as a group (Spronk, 1995). This bringing together of the group was considered in this study; however, the students were brought together by the technology of CMC rather than teleconferences.

Suggestions made by Spronk (1995) include having Aboriginal instructors or at least non-Aboriginals who have been screened for experience with, and a predisposition toward holistic and participatory educational approaches. Since the participants are living in their home communities, Spronk advised that distance educators need to understand the importance of learning in the context of family, workplace, and community when planning courses and choosing delivery methods. Although I am not Aboriginal, my personal style of teaching and my philosophy of teaching includes a participatory style. Due to my experience with female learners in Aboriginal communities, I am aware of the many demands, and am respectful of the many roles that female learners play in their

family and community. The data collected by this study were designed to help us understand the impact that these many roles have on informants' learning experiences.

Spronk did not make reference to courses or programs delivered by computer-mediated methods. It is possible that at the time of her writing, many of the Aboriginal communities did not have adequate telephone lines to accommodate simple electronic bulletin board systems, let alone Internet connections; therefore, universities and colleges may not have been delivering courses to Aboriginal communities by such methods. The purpose of the present study has been to understand the usefulness or appropriateness of computer-mediated methods for adult female learners in Aboriginal programs.

Computer-Mediated Delivery Methods

Andrusyszyn (1996) states that CMC offers learners and educators a sense of flexibility which is an important consideration for participants with multiple roles and obligations and that learners who are geographically distant from an educational institution can connect socially with other students and so foster a sense of community. She sees it as a way to reduce feelings of isolation which frequently are associated with other forms of distance delivery such as print-based correspondence courses.

Andrusyszyn (1996) calls CMC an "emancipatory medium for learning" where "the sense of community comes from the respect that is generated among participants, the freedom to take risks, and the freedom to share thoughts and feelings to the degree one desires" (p.6). She reminds us that many adults may have been away from an educational setting for a long time and may feel intimidated and vulnerable. She stresses the

importance of positive, ongoing, and genuine reinforcement to build self- confidence and competence. Such reinforcement was built into the program from which the informants were selected.

Andrusyszyn suggests including an initial face-to-face orientation at the beginning of the course to have students introduce themselves, get comfortable with the medium, and organize themselves while comfortably getting into the content of the course. Such experiences were built into the program delivery at the beginning and completion of this college program.

Although Andrusyszyn recognises that delivering courses by CMC is labour intensive for the instructor, and takes time for students to familiarize themselves with the technology, the method does have many advantages over other distance delivery methods. The method is asynchronous, which means that the students and instructor do not have to be on line at the same time. Thus, it is not necessary to be at a certain place at a certain time. This form of delivery is convenient and provides flexibility for the learners. They are able to log-on and read and write messages any time of day or night. Turn around time for assignments and feedback also can be greatly reduced. She recommends that instructors respond within a 24 hour time frame. Students also can learn from each other if the instructor encourages students to submit their assignments and lessons in public conferences. Group assignments also can be incorporated into this method of distance delivery. Such instructional delivery design creates a sense of community online which reduces the social isolation that many distance learners experience. Andrusyszyn suggests providing an assigned space (conference) just for socializing. In this study, the

Teacher Assistant Program included a conference (Coffeeshop) which was designated for such purposes.

Andrusyszyn argues that because CMC supports dialogue, there is the potential to construct knowledge through active learning, participation and dialogue. It is a medium that allows for increased learner control. She recommends group work and having students summarize various discussions that have taken place throughout the week as a way to increase student involvement and control.

Burge (1993) has a great deal of experience in distance education and much of her research has been in the area of computer-mediated delivery. She has a very down-to-earth approach as a practitioner and as a researcher. In her 1993 dissertation, Burge interviewed students who were taking graduate courses from the two CMC specialists of the time, Lynn Davie and Linda Harasim. Due to the distance, Burge interviewed 21 learners by telephone through an initial and final interview to find out how adults say they learn in a context that enables communication only by computer messaging.

Burge (1993) feels that CMC has direct relevance for the field of distance education because it addresses geographical and psychological isolation and may improve how much and how often students interact with each other and with the teacher. "Its presence can range from being 'an optional extra' to being the exclusive method of course delivery" (Burge, 1993, p.6). She also notes that CMC brings time freedom which audio-conferencing does not; in CMC, the student and tutor can communicate over 24 hours a day, seven days a week, whereas, audio-conferences require learners to be available at the same time in order to communicate. In CMC the messages may be stored

in a permanent data file for later reference. Such data were examined in the present study.

Another area of literature that has informed this study is that which uses the informant's voice in examining and reporting how, "self is formed and given meaning in the context of its relations with others" (Witherell & Noddings, 1991, p. 5). Carol Gilligan (1982) studied experiences of girls and women, allowed them to tell their stories, and reported the findings using the informants' own words. Later, Belenky, Clinchy, Goldberger and Tarule (1986) looked at education for women's development. Influenced by the work of Gilligan, but interested in intellectual development, these women built on William Perry's (1970) scheme which considered the intellectual and ethical development of men. Belenky and colleagues (1986) used an interview/case study approach to hear what 135 women of various ages, backgrounds, and circumstances had to say in their own terms about how they learn. Education was not narrowly defined in their study because Belenky and colleagues (1986) believed that women do not just learn in classrooms; they learn in relationships, by juggling life demands, by dealing with crises in families and communities. What resulted from their study was not only five categories of knowing, but also recommendations on how to provide better education for women.

Connected Teaching and Learning

Belenky and colleagues described connected teaching as an experience in which the process is shared. The teacher acts as a midwife who supports thinking and encourages students to speak. They describe a connected class as one in which dialogue occurs and

no one apologizes for uncertainty. Objectivity in connected teaching means seeing the student in the student's own terms (Belenky et al, 1986). I have used the interview/case study approach to gather my data, guide my analyses and reporting which allows me to compare my findings with the theoretical constructs of Belenky and colleagues (1986).

The selected literature has highlighted the relevant studies which informed this naturalistic study. The literature guided decisions in designing the purpose of this study, gathering, analysing and interpreting the data.

CHAPTER III

THE RESEARCH METHODOLOGY

Introduction

The topic to be explored, *What do the experiences of female students completing a full-time Aboriginal program by computer-mediated communication reveal about the usefulness and appropriateness of such instructional methods?* is a naturalistic study conducted using a qualitative research approach. Qualitative approach (Lincoln & Guba, 1985; Patton, 1990; Maykut & Morehouse, 1994) is designed to explore and describe such experiences. Ethical issues and provisions for trustworthiness will be considered first. The research methodology will then be described. The methodology involves the description of participant selection and data collection techniques. An interview guide, and interviewing procedures, as well as initial data processing and determination of preliminary categories of data also will be described in this chapter.

Ethical Issues

Lakehead University guidelines and procedures for research on human subjects have been followed. The participant consent form (Appendix C) was discussed at the orientation meeting with each of the selected participants. The form was signed by both the participant and the researcher. The participants were informed that they were volunteers and could withdraw at any time. They were assured that there was no risk of physical or psychological harm. Anonymity was maintained by assigning each participant

a pseudonym. For each of the three interviews, each participant was provided with the guiding questions for each session. (Appendix D).

Confidentiality has been assured. Although participant transcripts have been quoted, the full transcripts have not been included in this final report. The audio-taped interviews and transcripts will be stored securely for seven years as required by Lakehead University Research Guidelines.

Provisions for Trustworthiness

I used a variety of methods of data collection to increase trustworthiness of the study. This included face-to-face and online observations, in-depth interviews, telephone conversations, bulletin board exchanges and personal e-mail. The collection of data took place over an extended period of ten months. The participants in the study received copies of their profiles to confirm that they accurately portrayed their experiences in learning by CMC.

Participant Selection

Eight students volunteered to participate in the study. Sixteen students were enrolled in the Teacher Assistant Program that was to be delivered by computer-mediated communication. Thirteen were female. I met with the students at a face-to-face orientation session at the beginning of the program during which the students were told about my research study and invited to participate. Each female student was given a letter

(Appendix A) briefly describing the study and inviting participants to complete a volunteer form (Appendix B).

At first, some of the students were reluctant to volunteer. One of the more outgoing students completed her form and volunteered immediately. I was beginning to be concerned that I would not have enough volunteers to complete my research. After two volunteers had completed their forms and another indicated possible interest, I went ahead with the interviews. Two students were interviewed and they then told the other students not to be nervous that, "It was just a conversation". Others became willing to take part and tell their story. This student reaction resulted in my decision to interview all eight students who volunteered to be in the study.

Data Collection

Qualitative data gathering took place in natural settings (Lincoln & Guba, 1985; Patton, 1990; Maykut & Morehouse, 1994). Interviews took place in three sessions. The first face-to-face interview took place at the beginning of the first semester in mid-August, 1999; the second interview was by telephone and took place during the second semester in March, 2000. The final face-to-face interview was conducted in June, 2000, during the final week of the program. Field notes and a daily log also were maintained throughout the ten-month period.

The Initial Interview

The initial interviews took place at the site of the orientation session. This site was the home of a small regional campus. The interview for the first participant took place in

an unoccupied classroom where desks, chairs and pieces of audio-visual equipment were piled and pushed to one side. I pulled a small desk to the side and arranged two chairs for comfortable conversation. The tape recorder with attached microphone was propped between us. I was able to rest a notebook on the table for taking field notes. As the participant talked, I recorded brief notes of her responses. Although the campus was in the process of being repainted and furniture was piled in disarray in each room and hallway, the room was quiet and private and we were not disturbed. I was later informed that this room was booked for a class and I would have to relocate. The interviews for the remaining participants took place in an unoccupied computer lab. The lab also was piled with extra equipment and supplies from other rooms. Again the table and chairs were set up to make an intimate conversation area.

Guiding questions outlined in Appendix D and below were used to elicit information from participants. The questions for the participants were as follows:

1. Tell me about your educational background.
2. How do you feel about taking a program in which the computer is the major means of communication?
3. What do you anticipate the program will be like?
4. Describe what this orientation session has been like for you.

Probes were used to encourage the detail and flow of responses. I was sensitive to the pace of the interview and respected silences within each participant's response. These initial interviews were approximately fifteen minutes each. The interview concluded by

responding to any questions the participants had. Many of the questions had to do with the program and course material and only one participant asked about being able to read the final report.

The Second Interview

Since all of the participants had returned to their home communities after the orientation session, the second interview took place by telephone. Initially this interview was planned to take place at the end of the first semester marking the halfway point for the program. This time line was not possible to meet because the students were just getting used to using the computer bulletin board system, and it was a very busy time of year with final assignments, tests, and family commitments. I decided to postpone the interviews until the beginning of the new year. By then, new software had been added to the computer system, resulting in a few problems. This was not rectified completely for several weeks. Students were having trouble getting connected so they could upload their messages, and they were not receiving copies of their messages as assurance that they had been sent. This left them wondering if messages actually had been received. I felt this would have the "recency effect" on responses given by the participants. I had witnessed their frustrations about the system not working and the resulting negativity about the entire program and did not want this most recent event to colour their feelings about the whole program. I waited until the system was restored before interviewing the participants by telephone. At this point, six of the original participants for this study were

left in the program. Although two participants who had not continued in the program had not officially left the study, I was unable to locate them for the second interview.

The telephone interviews were arranged to take place at a convenient time for the participants. I called from my home office where I had no distractions and reached the participants at their own homes in their own communities. Although I had asked for a time when they would be able to talk with few distractions, this did not always happen. Many times there were little voices asking “mommy” for something, or conversations and televisions in the background. During these phone conversations, participants were asked to clarify what had been said in the initial interview and to answer questions that had been developed from the first interviews and online messages. Guiding questions are outlined in Appendix D as well as below. The responses were tape recorded.

1. Describe for me how you learn by this method.
2. What has your experience been like?
3. Please describe a typical day for me.
4. Describe some of the features of this method of learning.
5. Which features of this method helped you learn best?

Participants found it difficult to identify or describe the features of this method even though their responses indicated they appreciated the various features. I found it necessary to list the features and describe some such as the asynchronous nature of the delivery, which meant people did not have to be online at the same time in order to

communicate. They were then able to explain and expand on how these features worked for them.

The Final Interview

I interviewed six participants at the end of the program. I had the opportunity to see five of the participants in person for the final interview. This third interview was conducted face-to-face at the end of the program while the students were gathered at the main college campus to complete the final three courses and attend the graduation ceremony. One participant did not attend the final session and was interviewed by telephone.

The final interviews took place in a very large classroom next to the classroom being used by the students for their final courses. The room was large and open and difficult to make cozy. I attempted to make the situation more comfortable by choosing a table by the large window and setting the chairs on either side. The tape recorder was placed on the table between us. We sometimes could hear noises and bits of conversations coming from the class next door. One participant's baby cried. This two-month old had arrived at the final session with his mother. Tied to a cradle board, he barely made a sound until his mother moved to the next room to be interviewed. He stayed in the classroom, attended by many volunteer 'moms' and 'grandmothers' from the class. He chose this time to fuss and cry, distracting his mother from her conversation with me.

The questions for this interview were determined after the initial interviews took place. Responses from the initial interviews were reviewed with the participants for accuracy. Although I quoted word for word from their previous interviews, some seemed surprised by their own comments.

The participants seemed less attentive at this interview. They were excited about graduating and not interested in considering their experience. Their families would be arriving soon from out of town. This was not the time to be discussing their learning experiences. They had been successful and appreciated that, but they were not interested in determining why. It was time to celebrate and go home. Many indicated their homesickness and longing to go back to their community and family. This had been a long year for all the students.

The guiding questions for this final interview included the following:

1. What has taking this program by this method meant for you?
2. What was it like for you when the bulletin board system was not working consistently?
3. What are some of the challenges you encountered this past year in achieving your goals in this program and personally?
4. What other opportunities has having the computer given you?
5. Do you have any suggestions for the program?

One participant, who had the farthest to travel, was approaching her due date to deliver her baby. On the advice of her doctor, she decided not to travel to the final session

and graduation ceremony. This participant was interviewed by telephone for the final interview after her baby was born. This took several calls to arrange. The first call, which had been arranged previously, conflicted with the new baby's bath time. I suggested that I call back when then the participant would be able to talk. Later that day, we connected again, but the baby's father had left for work and was not there to care for the infant. We decided to continue with the interview anyway. There were a few distractions and interruptions, but these also reminded the participant of some points she wanted to make about taking the program by this method.

Field Notes

Field notes were kept throughout the period of the research. These served as a place to record observations during the daily interactions with the participants and also a place to make notes during interviews. I was aware through the unfortunate experience of others (Burge 1993) that tape recorders may not always get turned on and do not always work. I made notes of the responses made by each participant at each interview.

The notes were brief and details were sketchy. Notes were taken after the initial meeting and such things as the condition of the site for the initial face-to-face session were noted. I was disappointed to find that the classrooms were in the process of being painted and furniture was stacked and supplies were boxed or scattered about as the painters had pushed everything to the side to make room for ladders and drop cloths. The halls were lined with furniture and filing cabinets. It did not look like a place where

people were expected. It was not inviting. I made notes on my attempt to make the classroom more organized and appealing.

Arrived two hours early. Rearranged room. Put up pictures, photos of previous graduating classes. College being painted. Everything in disarray. Walls still wet. Halls congested. Painter still at work sanding and patching. (Field notes p.2-3)

Notes were made to record students' concerns and questions. There were many the first evening. "What if I'm working full time? How can I do my placement? My lessons?" (Field notes p. 4). There were other notes to check about student concerns. "TA's may strike - what happens if employed ? Placement???" (Field notes p. 4). "School contaminated. Closed for months. Check on placement" (Field notes p. 4)

I noted the behaviour and apparent mood of the group as they worked on assignments and group activities. " Printing lesson - Students animated - many laughs and jokes" (Field notes p. 4).

The notes also were used as a back up to the audio-tape recordings during the interviews. Very brief notes were made to record responses to the interview questions. These outlined the content of their replies but did not capture the inflections, tone or spirit of their responses as did the full transcripts from the tape recordings. My notes from the interviews were little more than lists of words beside each numbered question. Other notes contained more detail.

Gr.12 grad. Bank teller. Computer. Work with child with autism 1-1. Unqualified TA. Learn hands-on. (Field notes p. 6)

Taking care of my mom - surgery. Now moving back to take care of mother-in-law. 5 children - 17, 13, 10, 7 and 7 months, husband. (Field notes p. 16)

The notes served as a convenient place to record messages, questions and also notes to myself. It supplemented the daily log which is described next.

Daily Log

Besides the field notes, another method I used to record data was a daily log. Each day before turning on the computer, I entered the date on a new page in the log. Once on the computer, I would record each message from the students. Each message was numbered and identified by sender, receiver and a brief description of the message. The following is my short-hand record of a message sent by Marnie to the whole group in conference 61 which is Coffeeshop.

Marnie-ALL 61
 -getting supply work as lunch supervisor
 -SK child running around. How do I get him to stop?
 -ADHD on medication -what do I do?
 27 in SK (Log Mar.00, p. 237)

Although all the messages were stored on the computer and could be retrieved, I found the method of recording by hand more effective and more useful when it came to considering the data. This allowed me to see at a glance who was on line each day and I also was able to look back and see the number of messages, types of messages, who was sending, and who was receiving messages. I could get a feel for the types and tones of the messages by merely flipping through the log. The group seemed to move through a cycle.

There was an enormous high as the students returned to their communities and started using the computer to connect with each other. Contents of these messages contained among other things , “hooked on the computer”, “high on life”, and “home sweet home” (Log Aug.99, p.3-5). There was a flurry as one by one, each student mastered the process of getting her computer set up and that initial message of, “I did it!” appeared on the screen. This was followed by a consistent level of activity and eventually a drop near the end of the first semester. I recorded messages from students answering questions and offering advice on solving common dilemmas. One student wrote the instructions for using the off-line program to a student who was having trouble (Log Dec 99, p. 145). Another was giving advice on being authoritative while on placement (Log Dec. 99, p. 145).

The activity online picked up near the end of the semester. However, as indicated in the log notes, the content changed from conversation to questions and assignments as students tried desperately to meet the deadlines for their final assignments. The activity and mood was down in the second semester for a variety of reasons. I had assumed it was just losing some of the initial appeal as the system was used less by some for conversation. The log of messages suggested that students in the class were very busy with other commitments and had slowed activity online in order to take care of things in their lives. There was a period when the computer system was down and students used other means to submit assignments. As the group neared graduation, there was an increase in activity and a change in mood. Many messages were sent encouraging each other and counting down the days until graduation and the next face-to-face meeting.

This abbreviated form of a message from Marnie to Elaine was recorded a few weeks before graduation when there was a rumour that the students from this program were not included on the graduation list circulated by the college.

Marnie-Elaine 61
We must be on grad list!
(Log Apr, 00 p. 267)

If the atmosphere of the class could be recorded on a time line from the beginning to the end of the semester, a line would snake across the page to indicate the mood, tone and activity of the group. Overlapping and crossing this undulating line indicating the moods and activity of the group would be the individual patterns of ups and downs as students experienced joys, losses, pleasures and surprises in their lives.

Although the messages were recorded and stored on the computer, it was much easier to make observations from the printed pages of my log.

Samples of Messages

Although all of the messages were stored online and I kept a daily log, I also decided to print hard copies of some of the messages. Whenever I encountered a message that I felt related to what I was observing, I printed it and placed it in a pile. These were later sorted by sender and type of message.

At each reading and sorting, the personalities of the senders rang through in their characteristic choice of sayings and ways of expressing their thoughts and feelings. I found that I was able to identify the author of each message without looking at the name of the sender. The moods and circumstances were often identifiable not just by the

message but also by choice of words, tone of “voice”, and length of messages. Sometimes the moods and circumstances could be discerned by what was “said”, other times by what was not included in the message.

I found that I collected samples that followed a thread of conversation. The following is an example of a topic that started out in an assignment, was continued in a placement journal entry two days later, and showed up in Coffeeshop conference the following week. Marnie posted humorous accounts of a situation on placement that never seemed to end. She introduced the topic and continued to reflect and report on the incident over several days. She refers to it as, “The little boy who cries”. The group was first introduced to this situation in a posting Marnie made to a discussion conference.

Well, this morning was the JK’s [junior kindergarten class] and oh my god.

I’m talking sensitive kids.

There is this one little boy, S. S used to having his mother do everything for him, so this morning as soon as it came time to play, he started crying saying that he wanted to go home. Then the teacher spoke to me and told me he is always like that... I asked him to put on his shoes. I told him to at least try, next thing I knew he was crying again!!!!!! ...Later we went outside and S did not want to play with anyone and he started crying again. Then during playtime one boy told me that another boy was hurting him so I told him not to and he got upset as well.

Then a little girl took her jacket off, and I told her to put it back on, and she ALMOST started crying. It was a very sensitive day for them. (Sample message, Oct 6, 99)

Two days later Marnie was writing about her placement and described the same incident but this time elaborated and reflected on her feelings as a child at this age. She then described the methods she used to distract and redirect the child’s attention.

The incident that I picked this week is “the little boy who cries” in JK.

On Wednesday, S was so scared of everything period. He did not play with any of the other kids, all he did was cry for his mommy and daddy...Anyway, I forgot to mention that when he gets really upset, his eyes begin to go from side to side to side in a very fast pace. (I'm proud to say that I believe I noticed it BEFORE my supervising teacher). ..When I found out his mother was picking him up, I went to him later and told him how lucky he was...I started walking around the room then I decided to ask him to walk and guess what? HE DID (: Then I just kept trying to talk to him and before I knew it he was telling stories of his mom and dad. The point of my journal is even though we all may be very busy with this and that we all have to remember to teach and learn at the child's level. Being in JK and SK [senior kindergarten], I have noticed that the JK's are really sensitive, and I forgot to take a moment on that to reflect on it before going into the classroom....
(Sample Oct 8, 99).

A week later, Marnie updated the group on the little boy's progress by posting a message in Coffeeshop conference.

Well it's another day, another lesson learned. I did find out that you should not wear white to kindergarten class. (paint)
Today was the kindergarten class, and the little boy that I told you about is doing much better. He was smiling today and I was asking him about his mommy (when she took him to McDonald's last week) and it made his day. Enthusiasm is the key. I'm glad he's doing better, as long as there is a friendly face to greet him.
P.S.
There was a student who was sensitive today, IT WASN'T BECAUSE OF ME!
Marnie
(Sample Oct 13, 99)

Other sample messages provided records of replies to messages. Joanne and Natalie were both expecting during the program and the following message is from Natalie responding to an earlier message from Joanne.

Yes I'm still alive. It's been the longest 3 weeks of my life I've spent so much time in the hospital. My grandfather had cancer so the family started a 24 hour watch so that means everybody had to spend at least 4 hours a

day at the hospital. It's been horrible because let me tell you watching someone die of cancer is not a pretty thing to watch. Well finally our prayers have been answered and he passed away on Wednesday. We all know he is better now but we miss hm like crazy.

Okay, that's not all on Saturday I was brought to the hospital because I have been having a lot of false labour in the past two weeks ... I just want everything to be over with.

Take care

Love Natalie

Joanne returned Natalie's message with this reply.

Oh I know the feeling, You'll be all happy once you see your precious new baby, My little bundle of joy is really growing. Before I know he'll be crawling around. He's already 15 lbs. We went to get him weighed at the nursing station and he is only 6 weeks. I hope all goes well and everyone is healthy. I need your address so I can send you a picture of my baby's first photo. Send me yours after. Chow! (Sample May 16, 00)

This message was added to by Natalie and returned again to Joanne. The samples provided a quick reference to rich conversations that had taken place online during the program. The methods of collecting data have been explained. The processing and the analyses of this rich data will be described next.

Data Processing and Initial Analyses

I attempted to distinguish between the data gathering, processing and analyses of the data and to report these in order; however, I now realize that the analyses began as soon as I started to consider and work with the data. The data processing and analyses, therefore, inter-relate and overlap in this report.

After each set of interviews, the audio-tapes were listened to and transcribed by hand before being typed. This was done because of my inability to type to the speed of the conversation on the tape; however, the result was that I listened to each taped interview several times, thus becoming familiar with the participants' voices and stories. These transcripts were then reviewed. I used a system of coding so that each response could be identified for this report. The initial set of interviews was labelled A, the second set B and the third set C. For each transcript, each page, as well as each line was numbered. Photocopies of each of the transcripts were made and stored as a back-up copy. A third copy was made using a different colour of paper for each participant. This allowed me to easily identify the participant after cutting apart and sorting the responses. The strips of coloured paper were sorted into piles. The piles had no headings. The piles were reorganized and attempts were made to combine and reduce the number of piles. Twenty-one piles remained and each was given a heading that described the responses in that pile. The headings included anticipation and fears about the program, responsibilities, challenges and frustrations, participation, influential people in the program, comfort with computers and many other headings that reflected the responses of the participants. The headings were recorded along the top of several sheets of paper and the names of the participants were placed down the side of the sheet. I then went back to the piles and using the colour coding to identify the speaker, filled in the spaces. I was now able to spread out the sheets and see at a glance the responses of each participant for each of these preliminary categories.

Field notes were reviewed and responses were highlighted using different colours of highlighter pen to designate their responses. Patterns were noted and highlighted. These responses also were added to the chart.

The daily log of participants' online messages was reviewed and messages were counted, numbered and colour coded for each participant. The messages were recorded in categories of assignment, socializing, questions/clarification and encouragement. The hard copies of participant messages also were sorted by participant and by type of conversation using the same categories. These messages reflected and confirmed what had been stated in the interviews.

Initially profiles were generated as a means for organizing and recording information about each participant. After reading a research study by Fraser (2000) which included the use of participant profiles in the final report, I decided to include participant profiles in this final report as a way of allowing for a holistic portrayal of each participant. The profiles provide a place for each participant to tell her story in her own words.

Quotes from interviews are identified by interview, page and line. The interviews were labelled A, B and C. The reference (B p. 9, L. 6-8) means that the quote was taken from the second interview and has been recorded on page nine, lines six to eight of the transcript. Excerpts that have been used from online conferences have been indicated by date and conference number.

CHAPTER IV

PARTICIPANT PROFILES AND DATA ANALYSES

Introduction

This chapter begins with six profiles generated from the data provided by each of the participants who completed the study. The accounts are then analysed to consider similarities and differences. This chapter concludes with a discussion of the emergent themes.

Participant Profiles

An initial attempt was made to organize the profiles of the participants using the following headings: Demographics, Prior Education, Learning Preferences, when considering the learning experiences in the Aboriginal Teacher Assistant Program. These headings were chosen because they correlated to the main purpose of this study which was to look at who the informants were, how they learned and what their experiences in the program had been. However, each individual story is unique. Informants' responses could not be neatly categorized as the discussions often overlapped and intertwined topics. To put their stories into categories would lose the integrity and flow of their own words. Their stories have been told as they were related to me, although the names have been changed to protect their identities. In this chapter, participants have been introduced in the order in which they volunteered for the initial interview. Each profile begins on a new page to further highlight their individual stories.

Profile of Elaine

Elaine is a thirty-seven year old wife and mother of three teenage children. She lives in a small community that is situated on a major highway. Although she had access to larger centers and even a regional college campus, Elaine expressed her concern about driving. Even short distances to the Contact North site caused concern during the winter months. When speaking of the delivery method, Elaine said, "I didn't have to travel which is a big plus for me in the winter. I'm winter paranoid"(C p.1, L. 8,9).

Elaine had been working as a Classroom Assistant in her community school. She explained her reasons for taking this particular program in an online message to the service provider.

The reason I chose this program was because it allowed me to work on my own time, and stay at home. It also allows me to continue work part-time in my own community. I am able to follow a work pace that is comfortable and accessible, in order to be qualified in my choice of career placement. (Online message Jan.6, 00 conf 63)

Elaine had completed grade twelve and had taken many courses and workshops before enrolling in this program. She was very involved in community events and committees. She noted:

I'm a grade twelve graduate. I've also taken a bank teller course and computer course. I've worked with children for several years and, ah, I tried one-on-one work for a year and ah, too much political stuff in there so I didn't like that. I've worked as an unqualified TA for three years. I've been to various workshops, mostly to do with, um child abuse, uh sexual whatever. I've been a Foster Parent for thirteen years and that's why I have taken all those. (A p.1, L. 3-8)

She expressed her need for learning and claimed to be a lifelong learner. Elaine expected to enjoy this program. "Well as long as the computer works as it's supposed to, I think it is going to be wonderful"(A p.1, L. 15).

Elaine did not anticipate any problems in using the computer as a means of completing the program. She was very familiar with using the computer both as a word processor and as a means of communicating. "I'm kinda familiar with computers. They didn't intimidate me" (B p.3, L. 21).

Elaine used the computer on a daily basis to connect with me and the other students. It was part of her daily routine.

I'm a morning person. I get up. I have the paper. I go downstairs and read the computer. I come upstairs and start supper and then go to work for eight o'clock and I work all day 'til four and come home and finish making supper and ah, if I have any homework I'll do it then. Sometimes I do it in the morning depending on how much time I have. (B p. 5, L.12-15)

Elaine sent personal messages to individuals. She wrote directly to each classmate, encouraging and acknowledging others' contributions. She wrote the following message in the Coffeeshop conference which is an open conference for casual conversation.

Connie, it's always so great to see you on here, we really miss all of you (*name of community*) ladies, I especially miss you, I have been drinking my coffee from that beautiful mug you gave me and I think of you often, I can't wait till you're back in school and can tell me about your daily adventures with your students. (Online Nov. 3, 00, conf 61)

Most of these messages were posted in the designated public conference areas or Coffeeshop conference where other students could read and benefit from her messages. She also continued some conversations in private. Friendships beyond the level of classmate developed and flourished. This online message describes her feeling for another participant.

Marnie, you have to write a book, ;-)
A day without you, is a day without sunshine, you certainly make my day, HAHAHA I really got a kick out of the nesting comment...take care girl and have a great smoke free weekend. (Online Jan.7, 00 conf 87)

Elaine was usually the first to post her assignments. This caused some good-natured rivalry. She spoke of this when she was comparing this program to those delivered by correspondence.

Ya, I think it was because if you are just doing correspondence, it's just you and there's the competition too, you know . Who's completed what assignment and who's ahead and, "Oh my god, I'm getting behind! (C p.2, L. 6-8)

Elaine sought clarification on assignments, often before we had even reached that particular unit. She laughingly referred to herself as "a pest" for making such requests.

Shortly after the beginning of the second semester, there were technical problems with the system. It was not possible to connect at some times and other times participants were not sure if their messages were getting through. Elaine was very upset and disturbed by this turn of events. She let her displeasure be known. She was disappointed in the program, and frustrated by the delivery. Since Elaine had been one of the students using

the system the most, she was one of the students most affected. She missed having the bulletin board system available. She missed the previous reliability of the system.

I think it's because you got so used to using it and going on knowing your messages were sent and going to be looked at within the next week but when you couldn't send them then kinda got anxiety attacks. I think, "Oh no, it's going to be late," or maybe it's lost in never-never-land somewhere. (C p.1, L.18-21)

At one point, Elaine became very disappointed in the program. She had discovered that the school board in her district would not acknowledge this program. She would not be considered qualified even after graduating from this certificate program. She was angry and disappointed. However, Elaine did continue and complete the program, and explained why she decided to finish it.

Because no education is ever wasted and I know that I have a lot of other talents and if this didn't work out and they wanted to be stubborn, well so be it and ah, you know, I'll go on and do something else You know, maybe I'll take those other courses if they really push me and get a diploma instead of a certificate. If that's what it's going to take. Because that's what I love to do but as long as I'm working with kids, I can live with myself. That's how I kinda put it. That's how I got over that. Nothing I learned was wasted. I gained a lot of experience. I got over it. [Laughs]. (C p.2, L. 34-40)

Elaine, although chosen as the most influential person by other members of the group, found Marnie and Joanne as the people who most inspired and motivated her.

Uh, Marnie, I would say, because she's been through so much and she has so much on her plate and she's still pluggin' away there. You know she's certainly inspired me. Ya, I know there is other people - like Joanne. It takes a lot to have a whole family of little ones and be pregnant and you know and not being able to start school right away -assignments to catch up. Like you know it takes a lot of commitment from a person. A lot of character.(B p.6, L. 4-8)

Elaine was viewed by others as having the most influence on the class. She was considered to be encouraging and inspirational. Marnie wrote a message containing eleven positive statements about Elaine. We had discussed in an online conversation that it takes eleven positive statements to make up for one negative statement. After writing the eleven affirmations, Marnie ended the message by saying,

By the way I didn't say anything to Elaine to send 11 positives, I just wanted to come in Coffeeshop and say this to her so Elaine when you read this I want to say Thank-you so much, I don't think you realize how much I wish we were in the same room so I could give you a big hug. You wrote something in private, and it was like right on the ball so to speak. It is funny how you know things yourself, but for some reason you seem to forget it yourself, until someone comes along and tells you right on. Thank you so much Elaine, I don't think you realize how much you have helped me."(Online Nov. 24, 00 conf 61)

Profile of Marnie

Marnie has a husband and three young children. She had not been particularly successful in school. She didn't expect to go far in school as most of her of classmates and friends had not completed their high school education. Marnie had gone back to high school as an adult and had a taste of success. She wanted to further her education and seemed surprised and pleased that she actually was enrolled in college. This was so much further than her friends had gone.

Personally, I didn't think I was even going to come this far. I thought I was just going to be staying home with my kids all the time. (A p.2, L. 23)

Marnie was thirsty to learn. She was intent on being a good parent and considered this role very important. She spoke of having to learn to be a good parent by reading books on the subject, thus hinting at the possibility that she either may not have had good parenting role models or that she had not learned the skills required to be a parent before becoming one.

Marnie spoke many times about her role and responsibility as a Native woman. She appeared to bear the weight of her race on her shoulders. She felt she couldn't "mess up" because that would just reinforce what she thought was the stereotype of Native people. Marnie used some strong words in her description of the stereotype including "Indian", "drunk" and "irresponsible". She appeared to feel that this is how the rest of the world viewed Native people.

Natives aren't finishing school and the dropout rates are higher. I don't know, I guess I'm ashamed to be Indian sometimes. Just everything that goes on out there. (C p.1, L.18-20)

Marnie and her family had moved from a small town to a city during the time she was taking the Teacher Assistant Program. This required Marnie to change her field placement from a small community school to a large city. She felt uncomfortable at her second placement and wondered if some of the things and things she felt had to do with the fact that she was a Native woman. Although she struggled with these issues, Marnie would examine them and then usually find something about which she could be positive. She would describe her struggles and then write her journal entry and post it for classmates to read. She concluded a description of her day on placement where there had been the usual unpredictable moments with the following:

The point of the story is that you should stop and appreciate what you have. I never would of dreamed a year ago, that I would be graduated from high school, going to college, moved to..., and working in a school. I am very grateful where I am right now, and very proud of myself for what I have accomplished. I deserve to stop and laugh. (((: " (Online Dec. 19,00 Conf 84)

Marnie was refreshing in many ways and seemed excited about everyday observations. She tried to connect everything she was learning even when she had trouble finding the words.

You know this weekend, I went to ..., and I was doing my cleaning, then suddenly it came to me - if you are going to be a teacher, or in any sort of position like that, you can't be an ideal moralist right? You have to be willing to hear another view of an answer, besides when you think of it, it's just being a realistic! Isn't that what life is? Sometimes you just have to accept something and that is it? No buts about it!!!!Whether you like it or not?" (Online Nov. 14, 99 Conf 61)

She allowed herself to be vulnerable. This was shown by the way she opened up in the public conferences. She freely shared her partially thought-out insights which allowed others to observe the process of her thinking and experience her growth.

Marnie was very active on the bulletin board system. Her moods and feeling were very evident in her messages.

I've been on the computer quite a bit when my kids are busy with whatever else, and so tonight after my girls went to bed I came on the computer, so I started reading Coffeeshop and I started talking to my husband about this, you know how we can still talk and listen to each other and I go and look at him and he's totally not paying attention to me. I don't know what's going on but all I know is I feel so high right now, it's great, I think this program is exactly what I needed to help my true self come out. I feel great. (Online Aug. 27, 99 conf 61)

Marnie was active on the system posting assignments and socializing. She informed us when her baby learned to walk and when it was her anniversary. She allowed others into her home and her life through her descriptive messages.

Somebody write to me soon. I'm trying to do my homework and the kids are running around and my husband's vacuuming and the baby is crying - it's starting already. (Online Aug. 99 conf 60)

Although, Marnie considered Elaine as having the most influence on her, "I talk with her, like quite a bit but the majority of it is in private"(B p. 5, L. 25), Marnie herself, had an influence on all the other students. The messages from other students indicated that she provided them with great pleasure, inspiration and humor. After describing how her freezer was "up the creek" and her washer was broken, she finished her message with the highlight of the day, a humorous description of a volunteer at her school.

There was a parent helper in to do the crafts with the kids...it was funny watching him (yes it was a dad) try to do them, believe me it isn't as easy

as it looks, you have 5 kids at once, at least 3 are using wwwwwaay too much glue, and one is totally stumped on what he's even at the table for, and there is another one who is busy eating the glue. It gets pretty hectic, so I had to laugh to myself watching the parent come in. (Online Dec 8, 99 Conf 61)

Her classmates responded to her humorous stories and detailed descriptions of her placement experiences. They would write back and tell her how much they enjoyed her messages and how she affected them.

Marnie had many things happen during the year. She moved three times, had a close relative die after a lengthy illness, and had decisions to make concerning these situations. Marnie also had some difficulties on her placement. Her relocation to a new community meant obtaining and adjusting to a new placement. She encountered a different atmosphere at this school and she worked with children that she identified as coming from uncaring family homes. Marnie is very empathetic and she felt the children's hurt. She would vent her frustrations about the family situations the young students were in and would want to confront parents on their behavior. She was very concerned when drinking was a factor in a family situation. She sometimes wanted to do more than was required or was appropriate for her.

Marnie was disappointed to find that this program was recognized mainly in First Nation communities and that larger centers were not even aware of this special program.

To my very unpleasant surprise, this program is worthless. I need to have "developmental service worker" certificate or a "child and youth worker" certificate. It really bummed me out. According to the way they made things out to be, I wouldn't even be able to put my name on the supply list! (Online Mar 17, 00 Conf. 61)

Although Marnie used the computer a great deal to post assignments and to connect with the other students and had even referred to the bulletin board system as "being a lifeline"(B p. 4, L.10-11), she was not as frustrated as some when it was not working. "Um, a little bit but not the way that people I heard that people were at the end of their rope and everything" (C p.3, L. 15,16) although she did admit to missing some aspects of the system, "Because the part that I missed was - I don't know what to call it [*pause*] the other safe spot to go to"(C p.3 , L.18).

Profile of Joanne

Joanne is from a geographically isolated community. Access to this community is limited to air travel and vehicles when there is an ice road during the winter. Joanne is married to a professional in the community and is now a mother to four children. At the first session, Joanne shared with the group her suspicion that she was pregnant. It turned out to be true and her baby was born during the second semester of the program.

Along with being a mother to four young children, Joanne was employed at her community school and had been working as an assistant in the classroom for the previous two years. Her goal was to complete this program in preparation for enrolling in a teacher education program leading to a teaching certificate.

Joanne's educational experiences included leaving her home community to attend high school. "I had to move away from my home reserve since I was thirteen when I started high school" (A p.1 l.10). She spent some time in a residential school. She described enjoying residential life and liking the teachers; however, she did not like not being allowed to speak her language.

I went to a residential school. The only thing I didn't like was I wasn't able to talk my language in front of other people who didn't understand it.
(A p.1, L. 23-28)

Joanne had been considering taking a similar Teacher Assistant Program that was offered at another institution, but decided on this one because of the delivery method.

At first, I was going to go to..., then I found this program and it was shorter and I could stay at home and I didn't have to leave home that long and it was kind of interesting the way it was described. I enjoyed working on the computer.(A p.2, L. 9-11)

Joanne was not shy. She volunteered answers and readily contributed to discussions during the initial session. Joanne was the third person to volunteer to be a participant in this study. Joanne was surprised and pleased by the initial session of the program. She had anticipated lectures and book work and was happy to have a more hands-on approach.

I found that it's interesting. I wasn't expecting it to be the way we are right now. All the fun stuff we're doing. I thought it would be mostly lecture and all that stuff. I find this more fun. Different than high school. (A p.2, L. 25-27)

Joanne was very adept at the computer. She quickly learned the required programs for working on the bulletin board system. She was able to upload, download and work on the off-line computer program to create and send messages.

I enjoy working on the computer. I have two computers at home I can't really do my work on. All my kids are on the computer and my husband is on the computer and I will have my own personal computer. I am going to enjoy taking these courses. (A p.2, L.11-14)

Once back in her home community, Joanne found it was not possible to complete her placement. The community school was closed for an indefinite period for environmental reasons. This left the five candidates from this community wondering how they could meet the requirements of the program.

School was closed when we got back from (*location of initial session*) and we couldn't do our placement until December and we had a rough time trying to do our assignments when we didn't have a placement. (B p.1 l. 17-19)

The delivery method of this program allowed Joanne some flexibility. Students in the Aboriginal Teacher Assistant Program must complete a required number of hours of field placement which meant students were expected to be on placement working as a teacher assistant for a half-a-day, five days a week. Since Joanne was employed in the school full time, she could complete the number of placement hours in a shorter period of time.

Joanne organized her time and was resourceful in finding ways to complete her lessons. She worked ahead on her assignments and completed the ones she could while waiting for the school to reopen. Some assignments required access to school-age children for observation or practice lessons. Joanne would use her own children and other children in the community. Once the school was opened during the second semester, Joanne was able to make up placement hours and continued to work ahead on assignments in preparation for the time she would be away to have her baby. Joanne had to leave the community early to deliver the baby since her small community did not have the resources to deal with a birth. While in the city and waiting for her labor to begin, Joanne continued to work on her assignments. As soon as she returned to her home community, Joanne was on the computer informing everyone of the safe arrival of her son. She sent the following message to a fellow student:

I hope I'm still in the program, Well I left for awhile and had no access to a computer, I just got back yesterday, with my brand new baby, I did some assignments out there but I think I will just mail them to Theresa, I hope I can still do it, I go back to placement after Easter. (online Apr. 4, 00 con 61)

Joanne returned to her employment and placement at the school very soon. The baby attended school with her on many days. She described a community clean-up day when all of the school children and staff spent the day outside cleaning the yard and area around the school. Her new baby slept nearby in the car while she supervised the children.

Joanne used the computer to post assignments and to communicate with others. She was very busy with family and work and she was accustomed to having things not work out just as planned. She was realistic when the bulletin board system wasn't working very well for awhile.

I know that sometimes computers - you have problems with computers. It happens with anything , like any program you sometimes have problems. To me it didn't really matter. It gave me a little time off.[*Laughter*] (C p.3, L.11-16)

Although Joanne exhibited a great deal of intrinsic motivation and was willing and able to work well on her own, she did appreciate others in the class and described Elaine as an influence.

Ya, Elaine. She's the one always pushing me. She just always tries to keep me going. Like telling me to just keep going. If I need help to call her, write her. (B p.4, L.18-23)

Joanne posted a message to Elaine early in the new semester when she was finally able to attend her placement. She was only two months from her due date and she wrote, ".....I just wanted to know that you are our Miracle too, you keep me going, going, going, going, going etc."(Online Jan. 21, 00 conf 61).

Joanne brought her new baby to the final face-to-face session. The class was set up with a portable crib and a rocking chair. The baby tied to a homemade cradle board, attended all sessions and was passed from student to student. Everyone wanted a turn holding the baby.

Throughout the program, Joanne had expressed her intention of going on to meet the requirements for teacher certification. She had been encouraged by her education counselor and the principal at her community school to enrol in the Native Teacher Education Program to become a qualified teacher. At the final session, her response to questions about future plans was, "Hhmm, taking a year off so I can be with my new baby, than go on to taking my NTEP course" (C p.3, L. 14).

Profile of Tracy

Tracy had recently completed high school. At age seventeen, she was the youngest student in the class. She lived at home with her family and had few responsibilities other than completing this college program. Her home was in a small community that was very close to a secondary highway. She had easy access to town and even had opportunities to see me in person. She dropped by the college on her way to practice volleyball to hand in an assignment and another time just to say hello.

Tracy was quite upbeat about taking the program this way. During the initial interview, she stated that the advantage of taking the program this way was that she could do it from home and could work ahead.

It's been pretty good. I think it's easy taking it this way. Like, it's explained. You can do your work ahead of time. Like, giving you the course, what you have to do. Don't have to be in the classroom. (C, p. 1, L. 24-27)

Tracy was quite confident with using the computer as a means of taking the program, "Yep, well, I have the Internet so I'm kinda always on the computer" (B, p. 1, L. 27).

Tracy was very quiet but not timid. She rarely volunteered during the face-to-face sessions; however, when called upon, she would respond readily. The one time she became really involved was during a presentation by another student. The presentation took place at the final face-to-face session and involved an ice-breaker for which the students were assigned roles and given a few props. The play was then read by a narrator while the "actors" acted out their parts. Once Tracy put on her costume and held her

props, she became the character she was playing. "I thought I'd be real nervous when I had to present my stuff, but it was pretty good though, like with Elaine doing that little play" (C, p.3, L.6,7).

Tracy had set her priorities to get through the program. She did not seem to have the need or desire to connect with the other students. Her participation by the computer was limited to posting her assignments and requesting clarification. This was usually done in a private conference rather than the public course assignment conference. Tracy so seldomly used the computer for connecting with the other students that she did not notice when the system was down. When asked if this caused any frustration, her response was, "No, I can't even remember. No, I just did my work" (C, p.3, L.30-32). Although Tracy did not post many messages to other students, she did recognize the impact that Elaine had on the group. When asked who stood out as having an influence on the class, Tracy's response was, "Ah, like on the computer? Probably Elaine. She always had something nice to say to people...it makes you feel good I guess" (B p.3, L. 13-21).

Tracy was quite involved in the school community. She, along with other members of her family, coached volleyball and assisted in taking elementary and high school students to tournaments. "Well. My mom, my dad -he's not a teacher or anything but he does coaching basketball, soccer, volleyball" (C, p.5, L. 7-8). She paused, thought for a moment but did not respond to my probe for more information.

Tracy was interested in being qualified in many areas. She attended tournaments as an assistant coach and requested time away from her placement to complete training for firefighting.

Since Tracy's involvement on the bulletin board system was limited to assignments and straight forward requests for clarification, I feel that I know her the least of all the students who completed the program. However, Tracy seemed to feel that it fit her needs and noted, "I think this is the best course I have ever taken" (C, p.3, L.7).

Profile of Natalie

Natalie is from a larger center that was not in the area normally served by this college. Since the program was being delivered by a bulletin board system, it did not really matter where students resided. Natalie showed her interest in the program by her early contact with the college. She called the registrar's office often, and even called me at home in an effort to make sure her registration was being processed and her high school credits acknowledged. "I just went to the high school and said I needed four credits. They gave me a chance. I only had a month left to do it before going to ... (name of college site)"(C p.2, L. 6-7).

Natalie traveled fourteen hours by car to reach the initial face-to-face session. She had discovered that another person from her area also was enrolled so they made arrangements to meet and travel together. In her mid twenties, Natalie was very vivacious and she had a youthful appearance in attire and hairstyle. She sported several rings and tiny butterfly earrings in the many holes in her ears. During the face-to-face session, she used many facial expressions and gestures when she talked. Natalie was lively and entertaining. English was her second language and her unusual choice of sayings and her way of saying things made us laugh with her. The fact that she was not from a Northern community did not make a difference for long. She was included in activities and conversations and listened to and teased just like the others in the group.

Natalie soon became appreciative of the financial costs of living in other parts of the province. She came in one morning and expressed her disbelief at the price of cheese, her favorite food. The others in the group were quite surprised by her surprise. This

earned Natalie the nickname, "Cheese". The other students were used to high prices and informed her about the real price of food and goods in the north. Natalie could not believe what she now had to pay for a "two-four", referring to a twenty-four pack of Pepsi. It became a daily topic as she checked prices at the local grocery store each evening and reported back with the comparison price from her home community. The class then gave her a lesson on the price of alcohol in Northern communities explaining that the black market price usually reflected the cost of the fine: what one would pay if caught and convicted of selling alcohol on a "dry reserve". Her classmates felt comfortable enough with her responses to their stories that they continued to share other stories that are often considered the private concerns of their community. Each in turn told stories about their community including stories about other problems with addictions and selling of sniffing products such as hairspray. They explained their community's attempts at addressing the problems and how residents continued to find ways around these attempts.

Natalie and her travel companion made friends with two married males in the class and formed a study group. They learned from each other. The men learned to be more creative and the women enjoyed showing the males how to do primary lessons, games and activities. The men helped the two women with their writing since English was a second language for both.

Natalie was very open and honest when having difficulty with written assignments or instructions. Occasionally the language would cause some confusion or Natalie would interpret it as due to her language.

Natalie was engaged and planning to marry within the next month after beginning the program. She revealed during class discussion that this trip to the initial session was in place of her honeymoon since they couldn't afford to do both. Natalie was married soon after the initial session. She photocopied wedding photos and faxed and mailed them to members of the class. Natalie was delighted to find she was pregnant soon after her wedding.

Natalie was on the bulletin board system fairly often at first and wrote, "Just a quick hello and good night to everyone. This computer is so addicting its not even funny, I sit on my sofa and it seems like the computer is calling my name. Well good night everyone" (online Sept. 9, 00 conf 61); however, the wedding then married life and part-time work at a plywood plant did take time away from using the bulletin board system to socialize and connect. Her initial reaction to using the computer appeared to change. She later described her experience with the bulletin board system,

I don't really like it a lot. I mean because we've been having a hard time with the computer and things don't get sent and some people receive information and some don't and it's just like not getting all the work that you're supposed to get and it's just a headache and go to upload like everything - since Christmas I've been having a hard time with it and it's very confusing - don't know what to do and have to fax everything and kinda like everyday, "Is it gonna work or not?" (B p. 1, L.31-36)

Natalie was so frustrated with the bulletin board system that she posted this message to me in early April,

Theresa, please tell me you got this message or I'm gonna cry.
This is a test.
Write back okay
Take care
NATALIE IS BACK WATCH OUT. (online Apr. 3, 00 conf 0)

Natalie was very social yet when asked if this was an important component of having the bulletin board system, she replied,

Well ya, I'd write on it but not compared to a lot of people - like mostly everybody would send me e-mail - like Elaine, Marnie and them so I would like write back -but no, to actually write a whole story, I just never really - I guess it wasn't me and I didn't have anything to say so...(B p. 3, L. 5-7)

Natalie planned for her pregnancy and baby's birth by doing extra time on placement to make up for any days she might miss if the baby arrived early. Natalie had some complications with her pregnancy which kept her from being at the final face-to-face session. It was arranged that she could do extra assignments to complete the final three courses.

Hello Theresa

Sorry if I haven't been on (bulletin board system) lately. I can't really say I've been busy because I haven't. I've been sleeping most of the time. I started on my assignments I'm trying to get ahead in most cases something happens. I really intend to go to graduation so I'm resting now as much as I can. Well you have a good week.

P.S. I'm really enjoying this course and love my placement. They are very nice to me they even hire me for supply T.A. when they need someone so I was very pleased when the principal asked me.

See you soon and take care.(online Jan 23, 00 conf 61)

During the course of the program, Natalie's husband accepted a job in a northern community and Natalie stayed behind and moved in with her new mother-in-law. Books and belongings were packed and moved to the various locations with the result that needed items were often at some other location.

Natalie experienced many life changes during the year. When asked if there had been any changes since the initial interview, she laughed and replied,

Ya, got married, had the baby, moved to (name of small town) finished high school, packed, unpacked all the time. Time at my mom's, live at my mother-in-law's for another month. Now it's all over and I can relax. I'm still in pajamas at 3 o'clock. (C p. 3 , L.16-18)

Profile of Jennie

Jennie was from a remote community where flying or seasonal travel on the ice road is the means to get in and out of the community. Jennie was a very soft-spoken, smiling woman in her mid-thirties. She came to the initial session bringing her seven month old son and her husband to take care of him during class time. She shook my hand and introduced me to her husband. She held her chubby baby and smiled as she told me she was to be a grandmother in few months. Her other responsibilities included taking care of her mother-in-law and making medical arrangements for her own mother. Jennie's other four children remained in her community with family members.

Jennie had left school at grade seven. She recently returned to work on her high school credits and was still completing two credits at the time of the final interview. "Ya. I went back but I haven't finished it yet. I'm still doing it yet. [*Laughter*] (C p. 1, L.14).

Jennie was always the first one to arrive at the college during the initial face-to-face orientation session. Each day she would be by the front door waiting for me to unlock the building. While I did last minute preparations, Jennie tidied up the coffee room and made a fresh pot of coffee and waited for the others to arrive.

Although quiet during the initial session, Jennie always was able to provide examples when called upon. She drew on her vast experience from working in a school. She had a quiet, calming effect on others and all would listen when she spoke. Her mood was always jovial and she would giggle and laugh at her own stories and the stories that others shared about children in their classrooms. Jennie described Elaine as having the

most impact on the group. "She's enthusiastic and everything and she encourages everybody, everybody and how they are doin'" (B p. 5, L. 7-8).

Along with all of her other responsibilities as a wife and mother, Jennie continued to work as a classroom assistant in her community school. The principal had encouraged her to become qualified and to eventually to go on to become a teacher. This sometimes resulted in Jennie feeling pressured. "Ya. I'm feeling pressure. I am just glad I did this for myself" (C p. 1, L. 27). Jennie often was required to supply teach in her school. This interfered with her ability to complete her assignments and added to the pressure "Ya, it was just the time that I supply teach, then I think that kinda threw me off -[laughter] - on my courses" (B p. 1, L. 20). There was one month when Jennie was expected to supply teach everyday and she found that she could barely keep up with planning lessons and marking work and this resulted in her getting behind on the course assignments. Jennie worked very hard to catch up on the late assignments. She wrote her responses in the course package and instead of retyping everything onto the bulletin board system, Jennie asked if she could send everything. The only way to get parcels out of the community was by air. She sent the assignments on Bearskin Airlines and I went to the local airport to pick them up.

Jennie rarely asked for anything or complained about her situation. She took everything in stride. Since she did not use the bulletin board system very often, it was difficult to communicate with her using that method. When I didn't hear from her for a while, I would call her school. She would explain what was happening and if she was given supply teaching duties and I would discuss the situation with the principal. I

wondered how Jennie could be expected to complete all her course work if she was supply teaching, planning lessons and marking work. The principal would then promise to release her for some afternoons to go to the learning center to work. One time Jennie became more assertive and let her needs be known to the principal. "Well, I didn't, well, I let the principal know but he wasn't really listening when I told him going to class and stuff. Finally I told him. I went to sit there with him and now they don't do that" (B p. 2, L. 23).

There were many times when Jennie thought she would not complete the program. There were many times when I wondered how she could. She described some of the challenges, "Too many things to do at home, the teacher being away and couldn't do my assignments" (C p. 2, L.10).

By the time of the final face-to-face session, Jennie had completed all of the requirements. She arrived at the final session less energetic than she had been at the initial session. She found a quiet time to tell me about a very recent domestic dispute that had occurred just nights before. She still had an open gash on her head. Jennie said that usually when this happened, she would return the next day. This time she moved next door to her mother's and decided how she could still come to the final session. "That day, I told myself nothing is getting in the way. I'm going to finish this. Nobody is going to stop me" (C p. 3, L.14-15).

Summary

These profiles give a sample of the participants' life situations and experiences. By studying these profiles, as well as the data collected by other means, I found several emerging themes. These themes will now be discussed.

Analysing the Data by Themes

Although the profiles could not be neatly organized into categories without losing the integrity of the participants' stories, the data will now be considered according to the following themes: Demographics, Prior Education, and Learning Preferences. The participants' experiences in the Aboriginal Teacher Assistant Program then will be discussed. In considering demographics, I looked at age, location, marital status, family, work and other responsibilities. Participants' reasons for taking and completing the program also are addressed. Prior Education includes their educational history and their computer experience. Learning Preferences describes their styles and learning needs. Experiences in the program include student reactions to the delivery method, the program, and relationships with others.

Eight participants volunteered for this study; however, two left the program early in the first semester. One did not take her computer out of the box. The other set up her computer but did not meet program requirements and was not allowed to continue in the program. It would have been valuable to have had feedback from these two participants who left the program; unfortunately, they were not available for either the second or final interview.

Demographics

In terms of demographics, there was a variety of attributes including age, location marital status, family, work and other responsibilities as well as reasons for taking and completing the program. The participants were in the age range of seventeen to late thirties. Three of the participants lived in Aboriginal communities. Two of these communities were geographically remote. Two of the participants lived in larger centres.

Except for the youngest informant, all the participants were married and living with their husbands. All but two of the participants had children. Joanne had her fourth child during the second semester and Natalie gave birth just before her final interview. Tracy was the only participant without family responsibilities. She lived with her parents and had only herself and her school work to be concerned about. The others had many responsibilities. Along with children, there were family and community expectations as well as employment. Three were employed as part-time or full-time teacher assistants in their community schools. One worked at a plywood plant as a labourer and two were not employed at the time of this full-time program.

Reasons for taking and completing the program. Three of the participants were working as teacher assistants and wanted to become qualified. "I've worked as a TA for many years and now I want to get my certificate." Two of these wanted to continue on with their education to obtain their teaching certification. "I want to do this then NTEP [Native Teacher Education Program]." One participant was changing careers. "I work in a factory and it's time for a change. I really want to work with children." One wanted to go to college and work in a school to "be a good role model." One thought this program

sounded interesting and had no other plans at the time. Although these were the reasons given initially for taking the program, the reasons for staying and completing became personal reasons for which members had group support. The participants had made commitments to each other to all finish the program. They wrote messages, "only six more weeks left," planning for the day that they would all be at their graduation ceremony.

Prior Education

In considering their prior education, it was found that all but one would be considered adult learners. Only two completed high school within the normal time line. Four of the participants completed high school by alternative methods. These alternative methods included summer school, correspondence courses and a special delivery method using the radio. One participant was working on her last high-school credits at the time of the final interview.

Computer experience. All participants had previous computer experience and were comfortable using word processing programs. None showed fear or apprehension about learning to use the computers for communication. "This is easier than I thought it would be," said one relieved student. In fact all appeared to be comfortable and proficient at using the off-line and online programs before leaving the orientation session although one was, "afraid it would be hard because you said we couldn't leave until we knew how to use the programs." Several commented on their excitement and eagerness to get home and send messages to each other. One commented, "this is so addicting,"

while another claimed she was “hooked on computers.” Two participants made very limited use of the computer once they returned to their home community. “I just don’t have time with working and children and everything and sometimes it doesn’t work.” One had problems with her modem, “it won’t dial up,” and then experienced problems with the computer programs after, “my kids and family played on it and changed the settings. Now it won’t work.” The other limited user was very competent on the computer and she chose to use it for uploading assignments, for requesting clarification and for her private use to get on the Internet, but not for communicating on a regular basis with classmates saying, “I just don’t write much on there. I just use it for assignments and to read other people’s messages.”

Learning Preferences

The interviews with the participants revealed a variety of learning preferences. It was important for them to have practical learning which included immediate feedback, flexibility, structure and opportunities for participation. Several of the participants indicated their preference for hands-on or experiential learning. “I need to learn by doing it not just reading about it in a book. I really like the placement.” This hands-on learning was evident from the initial session. They preferred to be shown how to use the computer and then try it, rather than read about how to use it from the handbook. Several commented on enjoying the practical assignments and also the interviews that they were required to conduct with members of their communities. “I like doing the interview assignments. I would like to see more of that in the program.”

Two of the participants were very intent on getting things done and on getting it right. They were not only concerned about marks but on how to improve. "What did I do wrong to only get nine out of ten on that assignment?" They often requested feedback and reflected on assignments. "I really struggled with that outline for the presentation. I think I was making it too hard. I'm still not sure if I did it right." Although Elaine often had the highest marks on every project, test and assignment, she would worry and be anxious if she was not one of the first to post an assignment and ask, "Are you getting ahead of me or am I getting behind? I missed a day and now Marnie is ahead." She often asked for clarification and feedback. Marnie also was concerned about getting things right. "How can I improve my Multiple Intelligence assignment to get an A?" It was sometimes difficult to keep up with the eager students who wanted to work ahead. "You didn't reply to my question yet! How am I supposed to do the story assignment?"

Two other participants could be considered very pragmatic. Although Tracy and Joanne had very different circumstances, they had similar reactions. They did what they were supposed to do and did it in the time frame that was set-up. They would sometimes request their marks if they had missed the private e-mail message where they had been posted. They usually accepted their grades without comment or question. They did not give the impression of being unduly stressed about the program requirements. Deanna, who had been challenged by the school closure and by having a baby during the second semester, wrote, "I may not be able to finish all of the assignments. Have I done enough to pass?"

Natalie soon found that all her life changes were taking a toll on her. "I'm tired all the time and have to sleep a lot. My grandfather died, my placement and waiting for this baby - I can barely work on assignments and can't seem to get to the computer." She needed a program that could be flexible. She stayed focused and did what needed to be done. By the end of the program, her participation level had dropped considerably. "I'm just too tired to be on the computer." She read the course materials and did the assignments but did not spend a great deal of time reflecting on assignments or worrying about whether she had done well or not, "At this point, I just want to finish."

Jennie also required a very flexible program. "I can't leave. I have children and grandchildren on the way and work. My mom is sick and my husband's mother needs treatment. My principal wants me to work at the school." She rarely followed the schedule. Rather than keeping up in all of the courses, she would work through one package and complete the assignments and submit them in a variety of ways. One time when she had accumulated several assignments and lessons, she bundled them up and sent them to me on a plane.

Although the students needed the flexibility, they also required and appreciated the structure provided by having schedules, packages and time lines. All the participants mentioned the convenience of having the packages and assignments at the beginning of the semester and asked, "when are we getting the next schedule?" Four especially liked having the schedule that kept them on track and led to almost everyone posting assignments during the same week. This organization gave them the feeling that "we are in this together" and an understanding that others also were struggling with the same

assignment. "I'm still struggling with this presentation. How about you?" The participants often asked each other for clarification when working on particular assignments. "Did you get that or am I missing something? Where exactly is that assignment in the package?" They encouraged each other and offered feedback on each other's postings. The feedback would range from brief comments such as "way to go" or "I liked your idea" to "Congratulations on those who made the Dean's List!" Some wrote more lengthy responses, "You did such an exceptional job on that movement assignment. I like the idea of adding music..." when commenting on particular assignments.

The students also had the flexibility of working ahead on any assignment that either appealed to them or that fit into their personal schedule. "I want to get my interviews done right away because I know how busy I'm going to be later." They liked being able to look ahead and know what to expect even if was "two quizzes and three assignments in the same week!" There were no surprise assignments or quizzes.

The extent to which the students required participation varied greatly. All but two posted messages and assignments in the public conferences. One sent her messages, "in private e-mail everyday" because she did not like anyone to read her messages and assignments. Another was "horrified" that I replied to her in a public conference where "everyone can see it." The other participant often mailed or sent her assignments using the facsimile machine due to her technical difficulties and lateness in completing the assignments. She found sending what she had completed in her rough copy saved time over typing everything into a computer conference. It was interesting that even the ones who did not use the computer to send many messages, "really enjoyed reading everyone

else's messages." It helped them feel connected with the group. They knew that whenever they did log on, that messages from me and from classmates would be waiting for them.

Experiences in the Aboriginal Teacher Assistant Program

The participants' demographics, their prior educational experiences and their learning preferences had an impact on their experiences in the Teacher Assistant Aboriginal Program. When describing their experiences, the participants mentioned how they felt about the delivery method, the program, the challenges and frustrations, and their relationships with others. Each of these will now be discussed.

Delivery method and program. All of the participants found the face-to-face sessions useful. They liked knowing with whom they would be corresponding. "Meeting at the beginning made it easier" and "I like knowing who I'm talking to, their personality. This way I got to know everyone" were some of the comments. They mentioned that it was a place where they could learn to use the computer and meet the technical support staff. One participant was more reluctant about the final session and did mention the expense of giving up employment and the cost of paying for a hotel room for a week. "It was really expensive for those of us not sponsored and had to take a week off work." She was a student who was not receiving a sponsorship. The others enjoyed the final session and were very happy to see each other again. They planned work-out sessions and social outings for the evenings.

The participants liked the flexibility of being able to read and post messages at any time of the day or night. "I liked being able to go on at anytime. I'm sometimes up in the middle of the night with my baby and decide to go on then." They all mentioned being able to stay at home in their own communities, thus being able to continue with their lives and jobs. All preferred this method to other methods including traditional in-class courses and programs. One stated that, "this is the best course I've ever taken." Two others said they would take any other courses or programs if they were offered this way. One participant was encouraging her relatives and friends to take this program. "They saw how I was doing it, now the others want to take this program."

Although they all expressed liking the program delivery, there were comments about it being beneficial to talk to each other in person and "wouldn't it be nice to have another face-to-face session at the end of the first semester." Two mentioned wanting to have a monthly teleconference added to the delivery method. "It would be really nice if we could all have a teleconference." All expressed that there were certain assignments that they found particularly helpful or interesting. "Don't you find the assignments really interesting this semester?" Two participants expressed a desire for more Native content in the courses. "I know there were some assignments about Aboriginal learning styles and all, but I would like to see more about traditional ways. I thought there would be more since it is an Aboriginal Program and all." They liked having the computers to use and several used them to send personal e-mail to friends and also to explore the Internet. "I get on the Internet almost every day." When it was time to return the computers, one was

reluctant. She said, "I hate to give it up. It was nice to be able to say I have a computer at home."

Challenges. The participants faced a variety of challenges during the ten-month program. These ranged from family situations to lack of recognition by non-Aboriginal communities for the program certificate. One participant moved three times during the ten month period. Another was separated from her new husband for several months when he accepted employment in another town and she moved in with her mother-in-law while completing her program and placement. One was unable to begin her placement for several months because the school was closed for environmental reasons. She lamented that, "waiting for the school to open is frustrating," and wondered, "How will I ever catch-up?" Two had babies. Others had sick children and aging parents. One had to deal with domestic violence. All had many demands for their time along with taking this full-time program. "I don't have a life. I feel overwhelmed with it all."

Frustrations. When asked about frustrations, most answered "the computer". There was a love/ hate relationship with the machine and the delivery method. "I couldn't get online and I need my fix!" The participants who were the most frustrated by the computer were the ones who depended on it the most. They took for granted that it would work whenever they logged on and when it did not, they became agitated. "I think the system is down. It has been busy for hours. Can someone please check and reset?" Although there was only a brief period when the system didn't work, there were a few times when strange things happened. "Why do we keep getting these old messages? What's going on?"

The second most-mentioned frustration was dealing with administration. They vented that questions and requests were not answered, phone calls were not returned and correspondence with administrative personnel was frustrating. "I already completed that immunization form months ago." I usually received a phone call after any dealing the participant had with administration. "I left several messages and nobody gets back to me. Can you help?" Participants then started calling me before contacting administration to see if I could solve their problem, answer their question or pass on their message. "They said I had to send the receipt and I already did." It is interesting to note that administration was not part of the computer network. Students had not met representatives of administration nor did they have easy access for communicating. They did not like talking to people they did not know.

Relationships. Relationships were important to all the participants. They talked about feeling supported and encouraged by classmates, "I can't tell you what your support and your words mean to me," and all were able to name someone in the class who had a special impact on them. I witnessed friendships develop. Some of the participants phoned each other to enhance their communication. The evidence was posted in their online messages. "It was nice talking to you last night. I will call next time." I read messages in which participants were arranging to visit each other when one was in town for medical or other reasons. "Come for tea when you're in town. When is your appointment?" Even the student who did not send many messages appreciated having the opportunity available. "I don't write much because I'm shy, but I know it's there when I want to write." Participants stated that CMC met social and intellectual needs. One called it her

don't know how much I needed to hear that." For many it involved family. One participant's husband took over the child care and household responsibilities. "He does most of the cleaning, and the cooking too." One spoke of a principal who acted as an advisor and mentor. "She is always there encouraging me. She thinks I should be a teacher." Three had educational counsellors who encouraged and supported them. "My sponsor said if I want to be a teacher, be a teacher." The counsellors would do the paperwork and take care of some of the "irritating" administrative tasks allowing the students to focus on the course work. "My counsellor filled out that form for me." This support system was made up of people who they could see and talk to on a daily basis.

Summary

The participants had a variety of demographical attributes, prior educational experiences, and learning preferences. They had very different home lives with many challenges. They experienced joy and frustrations with the computer. However, they all indicated that the learning experience in the Aboriginal Teacher Assistant Program was positive in many ways. They enjoyed the flexibility it provided and the opportunities to establish and maintain relationships with the teacher and classmates.

CHAPTER V

INTERPRETATION

Introduction

The purpose of this chapter is to extend the analyses and interpret the findings. From this study, it is clear that there are relationships between and among the demographics of the participants, their prior education and their learning preferences. Each of these factors had an important influence on the way in which participants perceived their current educational experiences. Knowing how these factors interrelate and how they influenced the participants gives us a framework with which we can interpret the educational experiences of the participants in the Teacher Assistant Program as delivered by CMC.

To assist the interpretation, a model was developed. Figure 2. illustrates the relationships among demographics, prior educational experiences and learning preferences. In the following sections, I will discuss the relationship between and among each of these important themes and relate these findings to the literature.

Demographics and Prior Education

The demographics of the participants in this study had an impact on their prior learning and educational experiences (see figure 2, intersection A). Three of the women lived in geographically remote communities. This meant that they had to leave their home communities in order to attend high school. For four participants, this resulted in

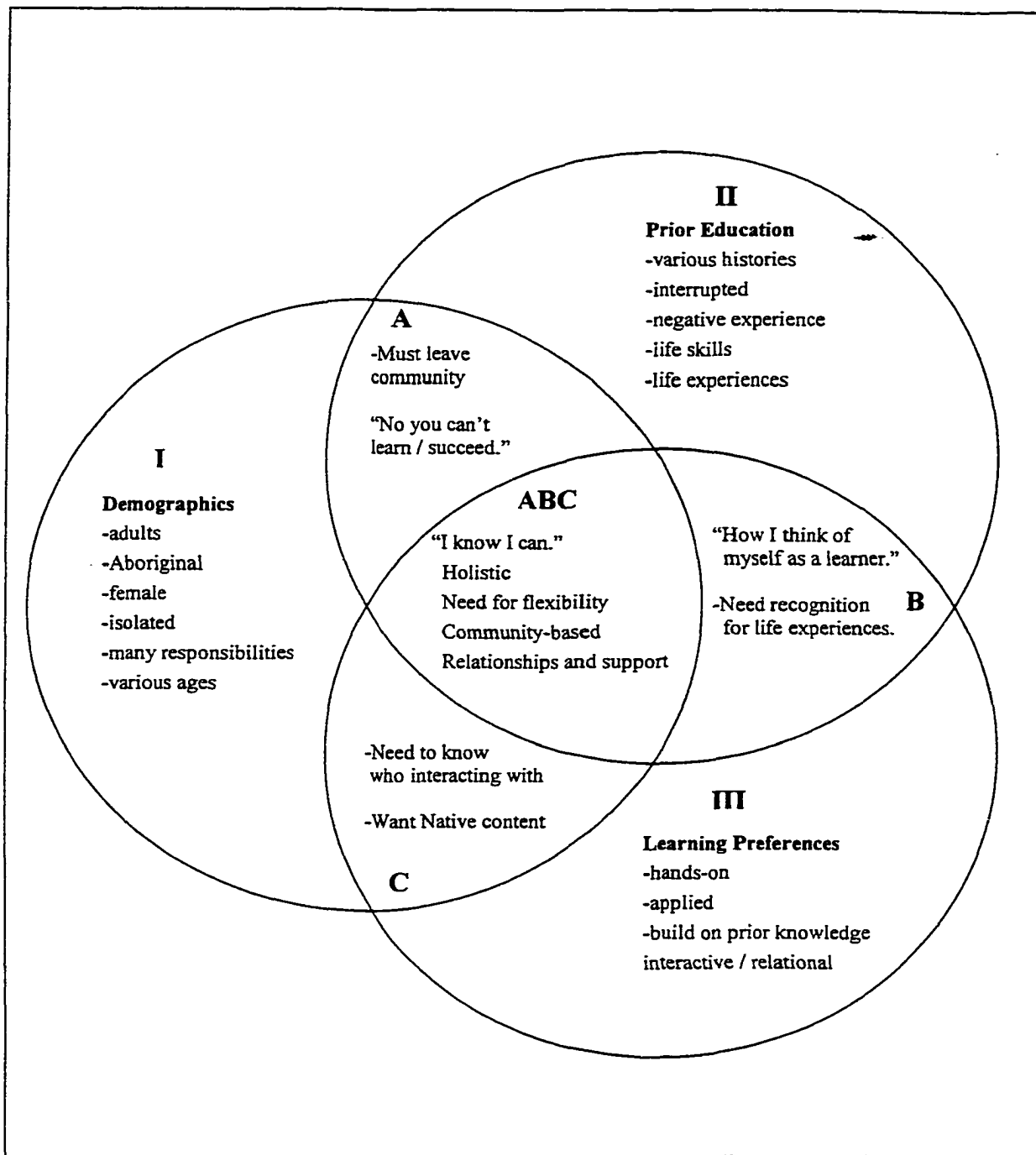


Figure 2: Interrelationships Among Themes

interrupted and unfinished secondary school education. Only two of the participants in this study completed their grade twelve in a regular high school and within the normal time line. It is very interesting to note that these two participants had access to a high school within their home communities. The others eventually completed high school by staying in their own communities and taking courses, and credits by alternate means. One took credits by attending summer school. Others depended on correspondence and distance education delivery methods using a radio. One participant was completing her last two high school credits at the time of the final interview.

All who finally finished their high school as adults did so while staying in their own community and taking courses by alternate means. Three studied and learned with other students from the same community who were enrolled in the same high school course. The alternate methods allowed them to stay at home and take care of home, families and work responsibilities while they received their education. Spronk (1995) noted the importance of learning in the context of family, work and community as well. Therefore, from studying the relationships between prior education and demographics, it is evident that community-based education was a must for these Aboriginal women.

Further, because a high school education was not easily accessible, there were few role models or peers in the community who had completed a high school education. Nor did there seem to be any expectation that these participants would complete their education.

All the participants who did not finish high school at the typical age stated that they had not liked school. They said it was not a pleasant experience, and that they did

not feel that they could do well at school. One specifically stated that she never thought she would finish high school let alone go to college.

For these women, formal education was not a confidence-building experience. However, the women did have valuable life experience, and only returned to school after gaining confidence by being successful in their lives. Belenky, Clinchy, Goldberger and Tarule (1986) believed that education should not be narrowly defined and found that women do not just learn in classrooms but also in relationships. They believed that women learn by juggling life demands and by dealing with crises in families and communities. In this study, four of the participants married, had children, and became involved in their communities and only then did they begin to work on high school credits. One who had left school and worked as a labourer decided that she wanted to change careers and needed to finish her high school credits before enrolling in college.

Prior Education and Learning Preferences

Prior educational experiences and learning preferences are intertwined (see figure 2, intersection B). As mentioned in the previous section, much of the learning for these participants came from life experiences. Joanne and Jennie were married and had children. They learned about parenting by watching and doing. Spronk (1995) noted this way of learning was important for Aboriginal people. She described a “watch, prepare then do” type of learning that was important for survival in earlier times and she stressed that it is still important today. Jennie’s mother-in-law lived with her family and Jennie learned from her. Jennie became a grandmother during the school year and was helping to

raise her new grandchild. Marnie mentioned how she turned to books to learn parenting. Elaine, Joanne, and Jennie worked as teacher assistants and gained knowledge about the position by doing it. Elaine attended workshops and held positions on committees. The participants learned and gained knowledge by living life. Five of them married, parented, worked, and ran households.

By studying the prior education of these women, it is evident that they appeared to learn best by being in their home community, and by practical, hands-on experiences. It was this life experience and practical learning that had fostered the development of knowledge and self-confidence. These experiences and the practical ways of learning must be need to be recognized and utilized in the educational experience.

Demographics and Learning Preferences

The learning needs of these Aboriginal women were influenced to a great degree by their demographics (see figure 2, intersection C). The women in this study ranged in age from seventeen to thirty seven years. They had many responsibilities ranging from school, work, children and elderly family members. Their learning needs required educational opportunities that could be worked into their already busy schedules and lives. They needed a method that allowed them to learn at convenient times. They needed a method that was flexible. CMC offered both these alternatives. This observation is consistent with the findings of Andrusyszyn (1996) who found that CMC offers a sense of flexibility which is an important factor to consider for participants with multiple roles and obligations.

Five of the participants came from communities that were small and close-knit. The other participant was from a small town and had close family ties before relocating to a larger centre. She still returned often to her home town to connect with family and friends. Community and family were of paramount importance. Spronk (1995) discussed the value of Aboriginal learners' heritage, the importance of oral traditions and the need for group solidarity. The participants in this study came from communities in which oral learning and story-telling were tradition. Relationships among members of the community were fostered and valued. The women were used to interacting with people that they knew, and they found it difficult to open up and share with those they did not know. The students who had taken courses by using the radio stated their reluctance to call in and speak because they did not know who would be listening. They had a need to know with whom they were talking. They needed to have an interpersonal relationship with the instructor and the other learners; when this was missing, they were reluctant to participate. These findings correlate with those of Spronk (1995) who discussed the importance of students having opportunities to meet the instructor and each other before beginning a course or program. She found that those who had face-to-face contact with instructors, tutors, counsellors, and other students to supplement self-study print materials were more successful.

In order to take risks and in order to learn from each other, the participants needed to feel safe and supported in their learning. They then were able to open up and share with each other their thoughts, their questions and even their assignments. They needed educational opportunities that valued their prior experiences and built on their strengths.

They needed a method that would encourage and support relationships between and among participants. The combination of the face-to-face meeting followed by the use of computer-mediated communication allowed this to happen.

Thematic Interrelationships and Emergent Barriers

A study of the demographics of these participants, their prior educational experiences and their learning preferences emphasizes that for them to be successful, any type of leaning needs to be community-based, flexible, and holistic. Interpersonal relationships need to be fostered and nurtured (see figure 2, intersection ABC). The participants need to feel connected to each other, and to the instructor. There must be appreciation and utilization of life experiences. Participants require a vehicle through which stories and life experiences can be shared. Participants need to be given the opportunity to fit their education in with their work, and home responsibilities. Staying in their home communities, and with their families and friends is a major consideration.

Thus, these women encountered many barriers to education. These included lack of access to education, lack of respect for learning needs and lack of recognition for home and work responsibilities. These barriers can be linked to demographics, prior educational experiences and learning preferences. It is apparent in this study, however, that the participants experienced success in the Teacher Assistant Program as delivered by CMC. Let us examine the factors that enabled these women to overcome their barriers and experience success in this particular program.

Interpretation Related to the Literature

Through the analyses of their experiences in this program, factors that led to the participants' success were identified. Students were able to stay in their own communities. Flexibility was built into the program. Their learning was holistic and respected Aboriginal values and traditions. These factors were supported by the CMC method of delivery.

Community-based

Leaving the community to receive education has been identified as one of the most important barriers experienced by these women. This Aboriginal Teacher Assistant Program did not require that students leave their homes and families for the entire ten-month duration of the program. The fact that the program was delivered to the students where they resided with only three weeks required to leave the community for the face-to-face sessions, allowed the participants to stay at home, tend to their families, and continue their employment and community responsibilities. Spronk (1995) advised that distance educators need to understand the importance of learning in the context of family, workplace and community, when planning and delivering courses and programs to students living in their home community.

Being able to stay in their communities meant that the participants had an established network of support that they could see and talk to on a daily basis. Some counted on husbands to take over child-care and household duties. Others counted on principals and education counsellors in their community to listen, advise and encourage

them in regard to completing assignments, juggling work loads and planning their future educational aspirations.

Flexibility

Learners had a great deal of control over their learning. When they understood how to use the technology, they had flexibility and alternatives. They could use it for different reasons and they could do different things at different times. Once they were back in their community, there was no time-clock telling them when or how long they must spend on their studies. There were no scheduled classes to attend. Students could read and work on lessons when it was convenient for them. They could log onto the bulletin board system at any time of day or night to send and receive messages, lessons and assignments. Burge (1993) found that since students and teacher can communicate 24 hours a day, seven days a week using CMC, this method brings freedom which audio-conferencing does not. She suggested that it could improve how much and how often students interacted with each other and with the teacher. The participants in this study had control over how often they connected with others. Some needed daily connection with the instructor and other students while others would only log on and attend to messages and assignments once a week. Although daily communication was encouraged by the instructor, it was not always possible or necessary.

When children were sick or there was extra work or other demands, it was possible to go several days without logging on to check messages without missing so much that it was impossible to catch up. The messages and assignments were still there

waiting for them. This is different than in traditional face-to-face classrooms where students must be present and there is no way to hear that lesson or be part of the discussion if the class is missed. Students had control over not only how often, but also how much they communicated. Although there were requirements on what and how many assignments must be completed, there was a great deal of flexibility when it came to other types of communication. Students were required to submit weekly journal entries regarding their placement experiences. Classmates were encouraged to respond to the entries and to make suggestions when they were requested. Some participants responded on a regular basis while others responded when they had the time or when a particular journal entry struck a chord with them. Coffeeshop conference was a place for social interaction. When and how students used this was left entirely up to the individual students. This allowed students to read what was posted when they wished and allowed them to respond and to post messages when and how often they felt the need.

Students could use the computer to connect with each other for both academic and social reasons. This fit not only educational needs but also lifestyle and circumstances. While one student may need to connect with the teacher and other students every morning in order to feel connected to the group, another may use it after being away for an extended period of time. Although the student who had been absent online for a long period of time had the absence noted by classmates, it was possible to slip back into the group and read and catch up on the flow of the conversation. The assignments and discussion would still be there and available. Burge & Haughey (1993) described how the storage of messages in permanent data files for later reference frees students who use

CMC. They do not have to make themselves available at certain times each day and can refer to lessons and messages at any time.

At the beginning of each semester, the course packages and instructional schedule allowed students to have access to all the learning materials, handouts, lessons, and assignments. This arrangement meant they could plan and had control over when they would work on lessons and assignments. One student took her packages and lessons with her when she had to leave her community to give birth. She worked on her lessons during her hospital stay and then posted them on the bulletin board system when she returned. Another got behind on the assignments, and set aside several afternoons to catch up on the assignments and was able to still maintain the standards and meet the requirements for graduating. Andrusyszyn (1996) found the asynchronous feature of CMC provided flexibility for learners and noted its advantage over other distance methods.

Holistic and Respected Aboriginal Values

The content and CMC delivery of the Aboriginal Teacher Assistant Program respected holistic values and traditions. The content was developed in consultation with an Aboriginal management committee. There was an attempt to make sure that the curriculum met with Native philosophy, and considered Aboriginal traditions. The program structure allowed the students to take what they learned and apply it during their field placement on a daily basis. Their experiences as parents and as teacher assistants in community schools were used as a framework for developing further skills. Their stories were valued and shared. They were encouraged to see how what they were learning

meshed with their experiences, and with what they knew. They were encouraged to reflect on these experiences and apply their learning to their situations, giving them the opportunities to fit their learning into the values and traditions of their own communities. As well, the content reflected a holistic philosophy by addressing the whole child and taking into account their spiritual, emotional, physical and intellectual domains.

The delivery method used in this program fostered a holistic lifestyle. Students did not have to choose between being a student, employee or parent. They could carry out all the roles that they had acquired and continue with the commitments they had made to family, employer and community. This correlates with Spronk's (1995) findings that Aboriginal learners require a holistic approach: an approach where their lifestyle and values are respected and accommodated.

Relationships

One need that has been identified is the need for relationships and for connecting to each other and the instructor. The two-week, face-to-face session at the beginning of the program was a necessary component. This contact allowed participants to establish an initial relationship with the instructor and with each other. Therefore, when they returned to their communities, they had a relationship on which to build. This plan allowed them to feel comfortable sharing assignments over the computer bulletin board system. Andrusyszyn (1996) strongly suggests including face-to-face orientations at the beginning of a course so students can introduce themselves, get comfortable with the medium and organize themselves while getting into the content of the course.

Belenky and others (1986) wrote about how important it is for women to learn through relationships and that women require a non-adversarial environment in order to learn. This theme is reaffirmed by Witherell and Noddings (1991) in defining self through meaningful and caring relationships. It was found in this study that the establishment of these relationships among the women and with the teacher through the face-to-face session and through the ongoing communication using CMC was a key component to the success of this program.

Andrusyszyn (1996) also recognized the need for relationships and social interaction for learners. She suggested a place where students could interact socially when using CMC. Participants in this study benefited a great deal from this opportunity as was indicated by their frequent use of the Coffeeshop conference. This program enabled students to establish new relationships as well a benefit from relationships in their communities which provided them with leadership and support.

Summary

This chapter has demonstrated the relationships between the factors which were identified as influencing the way in which participants perceived their educational experience in the Aboriginal Teacher Assistant Program. These factors were demographics, prior education and learning preferences. A study of these interrelationships indicated many barriers to success in prior educational experiences of these women. However, since the stories of the participants in this study revealed that they felt successful in the Teacher Assistant Program, elements of the program were

identified as contributing to the success by helping the women overcome the identified barriers. Several factors emerged as significant to their success in the program. Being community-based was a very important element. The flexibility of the delivery method met their needs. As well, the program was holistic and respectful of Aboriginal values and traditions. Relationships were fostered and nurtured. In Chapter VI, the study will be summarized and implications and recommendations will be presented.

CHAPTER VI

SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

Introduction

The research question, *What do the experiences of women completing a full-time Aboriginal program by CMC reveal about the usefulness and appropriateness of such instructional methods?* has been examined using naturalistic inquiry. This research study has reported on six women who have taken a full-time Aboriginal Teacher Assistant Program by computer-mediated communication. Of the eight students who originally volunteered, six completed the study. The study was conducted within Lakehead University ethical guidelines for research on human subjects. This chapter summarizes the findings, describes the emergent themes and identifies implications for delivering computer-mediated programs to adult Aboriginal learners in their home communities.

Summary

The selected background literature examined the work of previous scholars on listening to women's voices, connected learning, appropriate technology for Aboriginal learners, and the use of computer-mediated communication in meeting learners' needs. This study was informed and influenced by research conducted by Belenky, Clinchy, Goldberger and Tarule (1986) who studied and reported on women's learning by listening to women tell their own stories using their own words to describe their feelings and understandings. Belenky and colleagues also stressed the importance of connected teaching for women. They believed that education should not be narrowly defined and

found that women do not just learn in classrooms but also in relationships. They believed that women learn by juggling life's demands and by dealing with crises in families and communities. Spronk (1995) reported on appropriate learning technologies for Aboriginal learners, finding that Aboriginal learners were most successful when students had face-to-face contact with instructors and other learners to supplement printed packages. She also stressed the importance of supporting learning within a context of family, workplace and community. Andrusyszyn (1996) and Burge (1993) found CMC to be useful support for students learning at a distance. Andrusyszyn (1996) identified advantages of the CMC method of delivery over other distance methods. She reported that asynchronous delivery allowed for increased learner control of learning and as well as flexible time management. She suggested an initial face-to-face orientation at the beginning of a course. This was found to be very valuable for the participants in this study. Burge (1993) found CMC addressed geographical and psychological isolation.

Data were collected through face-to-face and telephone interviews. Field notes, online messages, a daily log and sample messages also were collected and analysed. Participant profiles initially were created as a means to record and organize information but were later incorporated into the report as a way to allow the voices of the women to be heard in a holistic manner.

The data processing consisted of transcribing interviews and colour-coding and sorting the responses which resulted in twenty-one preliminary categories. These were sorted and combined to form more general categories. The categories of demographics, prior education, and learning preferences emerged from these analyses. Participants'

comments on their experiences were considered under each heading. It was determined that the participants had completed the Aboriginal Teacher Assistant Program successfully, and had reported positive experiences in doing so. The factors that had an influence on how these participants interpreted their experiences was then explored. The interrelationships among demographics, prior educational experiences and learning preferences were discussed and interpreted in relation to the participants' experiences in the Aboriginal Teacher Assistant Program. It was determined that for these women to be successful, education must be community-based, flexible and holistic. These findings were congruent with previous research reported in the literature.

Implications

From this study on experiences of women taking a full-time college Aboriginal program by CMC, several recommendations can be suggested. It has been established that community-based programs are essential. Students need the opportunity to remain in their own communities. However, to be successful, certain aspects of the program must be considered. These include the appropriateness and variety of the delivery method, the culturally appropriate learning environment, and the inclusion of all parties involved in delivering the program.

The delivery method and the technology used for any program must be varied and appropriate. A "pure" form of using only traditional face-to-face, only printed correspondence packages or only CMC does not meet the needs of most learners. Learners and instructors benefit from having multiple ways of connecting and interacting

with each other and with the course content. Face-to-face orientations are extremely important for students and for the instructor for meeting each other, and for connecting both emotionally and academically and should be considered for programs being delivered by CMC. Printed schedules and course packages, although often considered archaic in the electronic age, still have proven value for students. Since technology is not always reliable, students require other means of obtaining and completing assignments. The printed packages provide this and the schedules keep students on track. CMC should be easy and accessible. User-friendly programs that provide basic delivery on a consistent basis are best. Being able to use and count on the CMC delivery is extremely important to learners and to their satisfaction in taking a college program.

A safe and culturally appropriate learning environment must be established and maintained. It is important that the instructor be aware of and respectful to Aboriginal values and traditions. If the teacher is not Aboriginal, he/she should have experience with Aboriginal programs and with Aboriginal culture before instructing courses and programs at a distance where communication is definitely more difficult, and misunderstandings more likely. Instructors and students should meet face-to-face before the beginning of a program to create a bond and a comfort level on which to build once back in their own communities. Candidates for instructing this program should be carefully screened for suitability. Prior experience with the program or course being taught is a must. Learning course content while attempting to do all of the other things that are required by distance delivery would leave little time or energy to create the positive learning environment so necessary for success.

All parties involved in the program should meet one another and also should be connected by the network using the same programs. It is important that along with the instructor, students meet the technical support staff and members of administration with whom they will be dealing. Based on the data from this study, students required a relationship with the technical support staff in order to feel comfortable requesting assistance. This relationship was missing with members of administration and resulted in miscommunication, and a general reluctance on the part of the students to deal directly with administration. An initial meeting could prove costly in both time and money and alternative methods for students to establish relationships with administrative staff should be explored. Choosing a few key staff members to be totally responsible for the distance students would eliminate the frustration of dealing with multiple departments and multiple part-time staff. If a face-to-face meeting is not feasible, introducing these members by posting a brief biography and description of the support they are able to provide may be adequate.

Recommendations for Further Study

Two recommendations emerge from this qualitative study on the experiences of women using CMC in an Aboriginal program. The first recommendation is to study the CMC delivery method from the perspective of the instructor. An understanding of the experiences of instructors, including their challenges, frustrations and successes would be useful for future planning and implementation of programs. This information also would be useful for professional development.

The second recommendation is to identify the characteristics, philosophies and strategies of teachers who are successful in creating connectedness through a CMC environment. It has been established in this study that the feeling of connection is important to Aboriginal women. Belenky (1987) describes the characteristics of teachers and the creation of environments that provide the climate for this connection in regular classrooms. Determining the philosophies, the techniques and the strategies that successful instructors employ to foster this positive interactive connectedness through the delivery method of computer-mediated communication is a challenge that needs to be addressed.

References

- Andrusyszyn, M. A., (1996). *Computer mediated conferencing: a resource guide*, <http://publish.uwo.ca/~maardrus/cmogui~1.htm>.
- Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). *Women's ways of knowing: The development of self, voice, and mind*. New York: Basic Books.
- Berge, Z. L., & Myers, B. (2000). Evaluating computer-mediated communication courses in higher education. *Journal of Educational Computing Research*, 23(4), 486-567.
- Bernt, F. L., & Bugbee, A. C. (1993). Study practices and attitudes related to academic success in a distance learning programme. *Distance Education*, 14(1), 97-112.
- Brant, C. (1990). Native ethics and rules of behaviour. *Canadian Journal of Psychiatry*, 35, 534-539.
- Burge, E. J. (1993). *Students' perceptions of learning in computer conferencing: a qualitative analysis*. Unpublished doctoral dissertation, University of Toronto, Toronto, ON.
- Burge, E. J., & Haughey, M. (1993). Transformative learning in reflective practice. In T. Evans & D. Nation (Eds.), *Reforming open and distance education*. (pp. 88-112). London: Kogan Page.
- Burge, E. J., & Lenskyj, H. (1990). Women studying in distance education: Issues and principles. *Journal of Distance Education*, 5(1), 20-37.
- Davie, L. E. (1988) The facilitation of adult learning through computer-mediated distance education. *Journal of Distance Education*, 3(2), 56-69.
- Fraser, J. (2000). *The lived experiences of senior students returning to university*. Unpublished masters thesis. Lakehead University, Thunder Bay, ON.
- Garrison, D. R. (1985). The three generations of technological innovations in distance education. *Distance Education*, 6(2), 235-241.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.

- Harasim, L. M., Hiltz, S. R., Teles, L., & Turoff, M. (1995). *Learning networks: A field guide to teaching and learning online*. Cambridge, MA: MIT Press.
- Hiltz, R.S. (1986) The virtual classroom using computer-mediated communication for university teaching. *Journal of Communication*. 36(2), 95-104.
- Lincoln, Y. S. & Guba, E. C. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Ludlow, B. L. (1994). A comparison of traditional and distance education models. *Proceedings of the Annual National Conference of the American Council on Rural Special Education*. Austin, TX (ED369 599).
- Maykut, P. & Morehouse, R. (1994). *Beginning qualitative research: A practical guide*. London: The Falmer Press.
- Moore, M. (1986). Self-directed learning and distance education. *Journal of Distance Education*. 1(1), 7-24.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd. ed.). Newbury Park, CA: Sage Publications.
- Paulsen, F. M. (1995). An overview of CMC and the online classroom in distance education. In Z. L. Berge, & M. P. Collins (Eds.), *Computer Mediated Communication and the Online Classroom, Volume III: Distance Learning*. Cresskill, NJ: Hampton Press.
- Paulsen, F. M. (1998). *Teaching techniques for computer-mediated communication*, Ann Arbor, MI, UMI Dissertation Services.
- Perry, W. G. (1970). *Forms of intellectual and ethical development in the college years: a schema*. New York, NY: Holt, Rinehart & Winston.
- Ross, R. A. (1992). *Dancing with a ghost: exploring Indian reality*. Toronto, ON: Reed Books Canada.
- Souder, W. E. (1993). The effectiveness of traditional vs. satellite delivery in three management of technology master's degree programs. *The American Journal of Distance Education*, 7(1), 37-53.

- Spronk, B. J. (1995) Appropriating learning technologies: Aboriginal learners, needs, and practices. In J. M. Roberts & E.M. Keough (Eds), *Why the information highway? Lessons from Open and Distance Learning*. pp. 77-101. Toronto:ON Trifolium Books Inc.
- Stubbs, S.T. & Burnham, B. R. (1990). An instrument for evaluating the potential effectiveness of electronic distance education systems. *The American Journal of Distance Education* 4(3), 25-37.
- Sweet, R. (ed.) (1989). *Post secondary distance education in canada: Policies, practices and priorities*. Edmonton, ON: Athabasca University.
- Turoff, M. (1997). Alternative futures for distance learning: the force and the darkside. *Online Journal of Distance Learning Administration*, 1(1).
[Http://www.westga.edu/~distance/turoff11.html](http://www.westga.edu/~distance/turoff11.html).
- van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). London, ON: The Althouse Press.
- Witherell, C. & Noddings, N. (Eds.). (1991). *Stories lives tell: narrative and dialogue in education*. New York, NY: Teachers College Press.

APPENDICES

Appendix A: Letter to Prospective Participants

Dear College Student:

This letter introduces a personal research project, and seeks your consent to participate in data gathering for the project.

I am an M.Ed. Student in the Faculty of Education of Lakehead University. To complete my degree I must carry out a research project and submit the analysis of the results to an examining committee. My advisor is Dr. R. McLeod. The topic of my research is "The Lived Experiences of Female Aboriginal students completing a full-time teacher assistant program by computer-mediated communication (CMC)".

The method of data collection will include face-to-face and online observation, and two in-depth face-to-face interviews, one at the beginning and one at the end of the program. Between the interviews there will be bulletin board exchanges and personal-e-mail supplemented with telephone conversations. The interviews will be recorded to make sure no information is lost. Data will be securely stored for seven years in accordance with Lakehead University's Ethics Guidelines.

The interviews will be recorded and transcribed to make sure no information is lost. Data will be stored securely for seven years in accordance with Lakehead University's Ethics Guidelines.

You are assured that your responses will be confidential to me. The interview tapes will not be used by anyone else, and any information that may link the discussion to you will be disguised - pseudonyms will be used in any quotations to illustrate points being made, and findings will be reported in categories of data that will prevent the identification of individual interviews. A full description of the study will be provided to you when we meet. You will have an opportunity during the data analysis to check my interpretations of what you said.

Generally, participants in this type of study have found the opportunity to quietly reflect upon their experience a rewarding one. I do not anticipate any risks to you considering the unstructured nature of the interviews and the measures to protect confidentiality and anonymity.

If you wish to volunteer to participate please sign and return the second part of this letter.

Thank you for considering this request. I look forward to the opportunity to work with you on this project.

Sincerely,

**Theresa Johnston
M.Ed. Student**

Appendix B: Volunteer Response Form

My signature on this sheet indicates that I am volunteering to participate in a qualitative study being conducted by Theresa Johnston, a Master of Education candidate, on the lived experiences of female Aboriginal students completing a full-time program by computer-mediated communication (CMC).

Signature of volunteer

Date

Address

Telephone

e-mail

Researcher Theresa Johnston
Telephone (807) 274-6210

e-mail
johnston@fort-frances.lakeheadu.ca

Appendix C: Participant Consent Form

My signature on this sheet indicates that I am volunteering to participate in a qualitative research study being conducted by Theresa Johnston, a Lakehead University, Master of Education candidate, on the lived experiences of female aboriginal students completing a full-time program by computer-mediated communication (CMC).

It also indicates that I understand the following:

- I am a volunteer and can withdraw at any time.
- There is no risk of physical or psychological harm.
- I may benefit from the study by developing a clearer focus of my lived experience of taking a program by CMC.
- The data I will provide will be included in the report under a pseudonym. This information will be shared only with the thesis supervisory committee.
- Raw data will be stored for seven years as required by Lakehead University Research Guidelines.
- I understand that I will remain anonymous in the written report.
- I will receive a summary of the report, upon request, following the completion of the project.

Signature of Participant

Date

phone number

Signature of Researcher

Date

phone number

Appendix D: Guiding Questions for Participant Interviews

Initial interview during two week face-to-face session in August 1999.

1. Tell me about your educational background and experiences.
2. How do you feel about taking a program in which the computer is the major means of communication?
3. What do you anticipate the program to be like?
4. Describe what this orientation session has been like for you.

Second interview (by telephone)

1. Describe for me how you learn by this method?
2. What has your experience been like?
3. Please describe a typical day in your program for me?
4. Describe some of the features of this method of learning?
5. Which features of this method helped you learn best?

Third interview at the end of the program

1. What has taking this program by this method meant for you?
2. What was it like for you when the bulletin board system was not working consistently?
3. What are some of the challenges you encountered this past year in achieving your goals in this program and personally?
4. What other opportunities has having the computer given you?
5. Do you have any suggestions for the program?