SPINNING A NORTHERN WEB:

WOMEN USING INFORMATION AND COMMUNICATION TECHNOLOGY TO

NETWORK FOR HEALTH AND WELLNESS

by

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Abstract

This case study explores women's experiences using information and communication technology (ICT) to address women's health concerns in northern, rural and remote communities in British Columbia. Incorporating features of collaborative, action research methodology, an online focus group structure was created for 12 women from across northern BC to interact with one another and undertake internet-based activities. The setting for the study was the primarily internet-based Women North Network (WNN) which, within a health promotion framework, seeks to build community by strengthening connections between women across the North and supports information sharing, action and the development of joint social and health-related research and policy initiatives. The WNN utilizes ICT as a means to overcome geographic isolation through the online components of email, a publicly accessible website and a password protected Online Gathering Space supported through WebCT – a distributive learning tool used to provide post-secondary off-campus education. Through their experience using the WNN online components, study participants offer an understanding of what is practical and meaningful for women using ICT and provide an account of what supports and prevents their access to and participation in the WNN. Findings suggest that through encountering supportive relationships which build a sense of community leading to concrete action women will become engaged in using ICT. Increased access to up-to-date computers, high-speed internet and the skills to use them effectively are also essential. Findings further suggest that by embracing the power of ICT and networks such as the WNN, social work and other health promotion professions will have greater ability to include diverse communities in influencing and developing social and health policy and service delivery in northern, rural and remote communities.

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Acknowledgement

A dedication to working for improved health for women in northern, rural and remote communities provided the momentum to conduct this study. My conviction that information and communication technology (ICT) has an important role in tackling health and social problems compelled me to explore the Women North Network (WNN) as a means for women across the north to join together in addressing the conditions that impact so profoundly on their health and well-being.

I would first like to thank the *Spinners* – the women who volunteered to participate in this project. Their commitment to and enthusiasm for learning about the WNN online strategy, and their fervour for exploring women's health in this unique way, made this project an incredible learning experience for me. I stand in awe of their passion for building strong, healthy communities in northern BC.

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Introduction

Prospects for women's health in northern British Columbia are far less optimistic than for their counterparts elsewhere in the province. Women in northern BC live an average of four years less than women living in southern, more urban areas (British Columbia Provincial Health Officer, 2000). In the current federal and provincial political climate of cutbacks to health and social services funding, issues related to women's health and wellness in northern, rural and remote communities are of grave concern (Hemingway, Fiske, & McLennan, 2002; Madrid, 2003). In order to bring a collective voice to these concerns, women in communities across British Columbia and the North are endeavouring to deal with issues at the local, regional and provincial levels through initiatives such as the BC Coalition of Women's Centres, Community Coordination on Violence Against Women, the Northern Women's Wellness Information Centre, the Northern Women's Forum, and the Women North Network. The concept of collaboration and action is common to these initiatives. Women are collaborating and acting on issues by responding to the impacts of funding cuts to Women's Centres and other services to women; by addressing specific health issues related to violence against women; by creating initiatives that provide health information, resources, and women-centred services, such as a Reproductive Screening Program; and by building on women's networks to reach out to women across the north on many of these issues and to organize to positively impact health policy and service delivery.

Women's health and wellness has been a focal point that has historically mobilized women to collaborate on initiatives, movements, and collective strategies (Alexander, Larosa, & Bader, 2001; Clarke & Olesen 1999; Ruzek, 1997). Women's health movements have addressed a range of issues from the demedicalization of women's health to social

justice. These movements have embraced political and social action principles along with

education, information sharing, and advocacy to promote women's health rather than

focusing primarily on disease prevention (Lippman, 1998; Norsigian et al., 1999). Recently,

women have recognized the value of utilizing information and communication technology[1]

(ICT) in their collaborative efforts. Pollock and Sutton (2003) describe this as an *electronic*

strategy that employs ICT as a means to further the goals of women's organizations and that

encompasses a focus on advocating for women's increased access to technology. The

Women North Network (WNN) Email News List, WNN WebCT Online Gathering Space,

and the WNN Website are components of an electronic strategy that are used by women in

northern British Columbia to further their collaborative efforts.

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[1] ICT refers to information and communication systems, hardware (equipment) and software (programs and applications required to use the equipment). It includes phone, facsimile machines, voice mail and computers, which includes the internet and electronic mail (email). It will also include the "organisational, informational and human contexts that are required for its functioning" (Scott, 2001, p. 411).

Chapter One

Impetus for the Study

The WNN was established through a project funded by Status of Women Canada

which was designed, administered and implemented by Northern FIRE: The Centre for

Women's Health Research at the University of Northern British Columbia (UNBC). Through

a process of consultation at community gatherings in 10 communities across northern British

Columbia, women discussed and strategized about issues related to health for themselves,

their families, and their communities. An inventory of individual, organizational, and

community skills, resources and expertise was compiled from information gained through

these gatherings and women's ways of networking and collaborating locally, regionally, and

provincially were discussed. A major outcome of the project is the primarily *online* (internet-

based) Women North Network which was envisioned as an electronic strategy that would

assist women to build on current collaboration efforts and expand their existing networks. By

becoming part of the network, women from diverse geographical locations and experiences

could continue to discuss and strategize about ways to improve health and wellness through

influencing and developing health and social policy; initiating joint research and community

capacity building projects; and sharing information, skills, knowledge, and local strategies

for addressing particular issues such as violence against women, poverty, and inequality

(Hemingway et al., 2002; Rodrigues, 2004).

Currently, the WNN is maintained by a group of women from the Social Work

Program at UNBC and from community-based women's health programs. The network has

several online components. These include a website, an email news mail list, and an Online

Gathering Space available through the Web Course Tool (WebCT) distributive (distance

education) learning program at UNBC that is used to create online courses. The WNN

Website is accessible to the public on the internet at the following web address:

http://www3.telus.net/public/wnn/. The WNN Email News List is a distribution list that

largely disseminates news items and announcements of interest, through email, to women

members who are primarily from communities in northern BC. The list has approximately

250 members and is moderated by the WNN volunteer coordinator. The Online Gathering

Space feature of the WNN is a password protected place for women to communicate, share

information, and resources, engage in discussions related to health and social policy and

practice issues for women. Furthermore, the interactive nature of the Online Gathering Space

provides an opportunity for women to collaborate on a range of action strategies to promote

positive change.

     The news email list is currently the most active component of the WNN electronic

strategy. Through my work as moderator of the email list and one of the contributors to the

website and the WNN Online Gathering Space, I have received positive feedback from the

members of the WNN through both email and through face-to-face discussions. WNN

members report that they appreciate and value the information sharing and topics for

discussion on the email list and are enthusiastic about the idea of the WNN Online Gathering

Space. In order to move this work forward, it is important to discover what specific features

of the electronic strategy are most meaningful and significant to women.

Rationale for the Spinning a Northern Web Study

     An evaluation of the Women North Project submitted to Status of Women Canada in

2002, raised issues that provide a focus for further development of the WNN. Some of the

points raised in that report are: sustaining and further building the membership of the WNN;

training for women on the technological components of the WNN; further expanding the information and resources provided through the network; and further exploring the capacity of the WNN to address health and social policy issues through collaborative action strategies (Hemingway et al., 2002).

The report concluded that it is critical for women in northern, rural and remote communities to explore the experience of the women's health movement and the use of an electronic strategy to confront the conditions that lead to ill health in women and their communities (Hemingway et al., 2002; Pollock & Sutton, 2003). In response to this evaluation, the current study arose from a desire to explore the internet components of the WNN as a strategy to address women's health issues and to capture the direct experience of network participants as a guide to its future development.

The rationale for this study is further supported by recommendations made by Rodrigues (2004) which came out of her work as a practicum student with the Women North Network project. She emphasizes the value of further developing and expanding the WNN because as cuts to social and health programs and services continue "the need to network, coordinate and share resources becomes more important than ever before" (p. 60) and the internet could have an important role in that process.

Chapter Two

Purpose of the Study

The purpose of this study was to gain a better understanding of the WNN online

strategy for women addressing health issues and the experience of women using information

and communication technology to further their networking goals and activities. The voice of

women, expressed through this project, provides an understanding of what is practical,

meaningful and supportive for women using ICT. Within the setting of the already

established WNN Email News List, Website and WebCT Online Gathering Space, this case

study of women using ICT provided an opportunity for women to explore what issues are

critical to the future development of the Women North Network and other similar networks.

Statement of Research Problem

This study, *Spinning a Northern Web: Women Using Information and*

Communication Technology to Network for Health And Wellness, used a primarily qualitative

approach to explore the question: Is the internet an effective/useful/appropriate means to

support collaboration and coordination among women in northern, rural and remote

communities to disseminate health and wellness information; to share resources and

strategies; and to organize to influence health and social policy and service delivery? The

setting for the research was the Women North Network Email List, the WNN Website and

the Online Gathering Space (see Table 1). I proposed to explore and describe the following

five questions:

1. What supports women in using the WNN?

2. What information and resources do women gain from the WNN online strategy that
   they can use in their work and in their day-to-day lives?

3. What makes using the WNN Email List and Gathering Space worthwhile?

4. What specific things about the WNN Email and Gathering Space prevent women from using it?

5. How does the WNN support women in moving their political and social action strategies forward?

These questions were explored entirely online using the WNN Email List, Website and the

WNN Online Gathering Space.

Table 1

WNN Online Components Used in the Spinning a Northern Web Study

Component	Spinning a Northern Web Interactive Email List (a subsidiary of the WNN News Email List)	WNN Website (publicly accessible on the internet)	WNN WebCT Online Gathering Space (password protected for WNN members only)

Features & Functions	• Comprised only of research participants and researcher
	• Email communication amongst participants
	• All messages go to all individuals on the list
	• News items from WNN News email list, also sent to this list
		• A link to the Spinning a Northern Web page provides convenient access to:
		  ▪ Study purpose & goals
		  ▪ WebCT Tutorials
		  ▪ Participant favourite documents and links
		  ▪ WNN WebCT Online Gathering Space log in page
			• Internal email system
			• Discussion Forum
			• Live Chat
			• Links to internal and external websites and documents
			• Women's Profiles List
			• Calendar of Events
			• WebCT Tutorial and Library of How Tos
			• Spinning a Northern Web Organizer Page with Purpose, Goals and Research Activities and project related links
			• Tracking and recording participant activity

The Women North Network Email List is comprised of email addresses of the women who are members of the WNN. The original list was made up of women who were part of the Women North Project. Over the past 2 years, new members have been added to the list as women have learned about the WNN and expressed interest in being a part of it. Information, resources and news about a broad range of women's health and wellness topics is distributed

through the list. It is also a means for women to discuss issues of concern and to plan action strategies. A subsidiary list of the WNN Email List: The Spinning a Northern Web Interactive Email List (see Table 1) was created expressly for study participants and research activities.

The Women North Network Website was developed to provide a way to access information about the Women North Network in a public way on the internet. Furthermore, it includes contact information, a backgrounder on and a presentation about the Women North Network. It accommodates *links* (often characterized by being underlined or an alternate coloured font) which provide a reference that points to and displays the target page or document when clicked. Links include other websites of interest; information on becoming a member of the Women North Network; a preview of and a tutorial on the WNN WebCT Online Gathering Space. As Table 1 indicates, for this project, a Spinning a Northern Web page was created and linked to the WNN Website *homepage* (an entry or welcome page both on the website and the WebCT Online Gathering Space – the main organizer page in WebCT). It has links to the purpose and goals of the project and to the tutorials as well as links to favourite websites and documents that the research participants asked to be placed on the website. During the project, the website was administered by a technical research assistant who has extensive experience working with the WNN and was hired to assist the researcher and participants with technical issues.

The Women North Network WebCT Online Gathering Space is a password protected internet-available place for women to communicate and interact (Appendix A). The UNBC Centre for Teaching and Learning has provided the Women North Network with access to WebCT which is used for UNBC distributive learning programs. As shown in Table 1, the

Online Gathering Space includes a *WebCT Internal Email* communication tool that is restricted to WebCT and allows one-to-one or one-to-many messages; similar to regular email. It also includes a *WebCT Discussion Forum* that functions like a 'virtual bulletin board' where messages and replies to messages can be posted to various topics. Also featured is the *WebCT Live Chat* tool that supports real time text communication. Additionally, there are links to external websites; a calendar of events; links to newsletters and documents; and links to various organizations which have created their own individual 'sites' within the WNN Online Gathering Space. The WebCT software also provided a means for the researcher to track participants. This includes how many times they visit the various features available to them, how often they read postings, and how often they post to the space; thus, providing a quantitative look at participant access to and utilization of the WNN WebCT Online Gathering Space.

Chapter Three

Researcher Standpoint

As a way of ensuring rigour in this research study and as part of ethical practice, it is important to situate myself as researcher in this study and to acknowledge my role in the process (Caelli, Ray, & Mill, 2003; Davies & Dodd, 2002; Sandelowski, 1986). It is important that I start with my own experience in order to clarify my biases and locate myself with regards to the issues that I am exploring (Campbell & Gregor, 2002; Reinharz, 1992). This will be a way for me to explore my worldview, presuppositions and assumptions along with grounding me in a mindful perspective of how these may impact my work in this study. A mindful approach brings with it "the continuous creation of new categories; openness to new information; and an implicit awareness of more than one perspective" (Langer, 1997, p. 4) – all critical to credible research. In essence, this will become a framework for remaining attentive to my experiential way of understanding the world and the theoretical perspectives that inform my 'analytic lens' (Caelli et al., 2003).

I come to this research and to my social work practice from the stance of a learner. I subscribe to various values, beliefs and perspectives and bring an understanding of the world through my lived experience. However, these are within the larger standpoint of discomfort with the notion that I may know something that could be considered complete. Theory may provide a context for me to be mindful of various issues such as power relations, various constructs of social problems, and ideas about ways to initiate social change; however, I choose to occupy a learning space that challenges me to consider where, how and why I subscribe to my beliefs and values and when, how and why I may be imposing those upon others.

My interest in issues related to women's health come not only from my own encounters with health and wellness, but also from the knowledge gained through working with women in northern BC who have experienced numerous oppressions. It has become apparent to me that women's health is profoundly negatively impacted by poverty, violence, lack of education and economic inequality. In particular, I am concerned about how these issues impact on women's health in northern BC due to complicating factors such as geographic, social and cultural isolation; lack of access to basic needs, appropriate housing and employment; and lack of health and social services (Leipert, 1999; Leipert & Reutter, 2005; Madrid, 2003). Furthermore, these factors become more repressive and harsh when coupled with issues related to culture, sexual orientation, ability/disability, age and race (Leipert & Reutter, 1998).

Working collaboratively with women from across the province to address issues of violence against women, I noticed that women are empowered individually and collectively by drawing on their strengths and resources when working together to bring about positive change. It has become increasingly clear to me that, in order for women to meet their goals of equality and freedom from oppression, it is critical to create a process for sharing resources, knowledge, and skills as well as to create strategies to address issues of common concern.

Working with women in communities that are diverse and geographically isolated with little in the way of formal funding, makes it apparent to me that connecting and sharing must occur in ways beyond the traditional face-to-face means. Telephone, fax and email technology have served to connect women briefly on specific issues or for specific reasons. Creating broader connections in more organized ways may be a means to address and strategize about issues on an ongoing basis. I believe that there must be a way of using

information and communication technologies, including the internet, to further women's goals for social justice and equality leading to increased health and wellness.

I am enthusiastic and hopeful about the role of computers, internet and other technologies in furthering collective goals for positive social change in general and for women's health in particular. However, I am mindful that these are 'tools' to be utilized and are not meant to replace traditional, collaborative strategies. This is of particular importance because many individuals do not have access to computers and internet, to training opportunities and may not share this enthusiasm for technology. Furthermore, although I have had little formal training in how to apply technology to my work, I have a privileged social location allowing me to have easy access to computers and internet and have had many opportunities for informal learning.

Working with women in northern BC to build a network that is concerned with broad issues of health and wellness fits well within my experience. In particular, it is in keeping with my desire to work with women to build strong collaborative relationships working towards individual and collective empowerment. My role as Volunteer Coordinator of the Women North Network situates me in a position to build on relationships within the WNN and to work with women to explore the questions posed for this study. Although I have a historical connection to the WNN, I am neither an expert on women's health issues nor am I in any way an expert on the use of computers, internet and other ICT related objects. I do however, bring my lived and learned experience to this process.

Theoretical Perspectives

In building a strengths-based social work practice framework, I draw on progressive, structural, anti-oppressive social work values and principles to inform my understanding of

the context within which people strive to deal with issues at the individual, community and structural level. My perception of a strengths-based approach means not only drawing on strengths, abilities and attributes to overcome or address issues and oppression (Saleebey, 2002), but also to recognize, affirm and cultivate strengths in order to create a new context within which change may occur.

Structural social work embraces a progressive approach drawing on critical theory that seeks an alternative to the traditional view of social problems which focuses on individual inadequacies (Mullaly, 1997). Traditional approaches view individuals as ultimately responsible for the difficulties they experience and the individual as the site for creating change. Progressive more 'radical' approaches link individual, personal, and social problems to structures in society created by particular groups who seek to maintain their socio-economic dominance (Fook, 1993). Structural social work draws on features from Marxist, social democratic, feminist and anti-racist approaches (Mullaly, 1997). These approaches support marginalized individuals and groups in uniting and collaborating on issues of common interest while at the same time recognizing and promoting diversity (Lundy, 2004; Mullaly, 1997).

Structural social work principles recognize the importance of individuals within the context of their lived experience. The issues of oppression that impact on the personal lives of individuals are interrelated with the community and larger society (Lundy, 2004; Mullaly, 2002). From this perspective, working for positive change means working with (not on) individuals to change the structures in families, communities and society that currently result in inequality and oppression. A critical component of working with individuals and

communities is to create positive change through a process of empowerment with the goal of challenging the structures of oppression.

Empowerment from a structural perspective is a process whereby oppressed individuals and groups come to recognize the structures that lead to oppression and the steps required to challenge and change those conditions (Ife, 1997; Lundy, 2004; Mullaly 1997). In order to do this, I as researcher must challenge hierarchical roles that are based on socially constructed positions within society. An integral part of empowerment is to work together from a 'power with' or 'power to' location, where each individual is an 'expert' in their own right (Bishop, 1994). A recognition that the role of researcher carries with it an element of 'power over' must be transparent throughout the research process. A more egalitarian relationship can be built between researcher and participants by adopting a 'power with' and 'power to' position that subscribes to open, reciprocal, supportive, inclusive, collaborative principles (Reinharz, 1992). These principles are fundamental to anti-oppressive social work practice.

Oppression is a tactic used by groups of individuals to gain power over other groups in order to exploit them in some way (Bishop, 1994). Anti-oppressive social work practice recognizes that individual private/personal problems are a result of public/political issues (Carniol, 2000). It is about working at the individual, community and structural levels, building on strengths to create actions towards resisting and challenging oppression and changing "those institutional arrangements, social processes and social practices that work together to benefit the dominant group" (Mullaly, 2002, p. 193). The goal for me as a social worker is to be part of creating positive social change. Social change is not solely about identifying and addressing specific issues, problems or deficits. It is about reconstructing a

world that individuals and communities have created for themselves through a process of working towards a positive existence.

My research/practice framework is also informed by and incorporates values and principles of women-centred health which includes the anti-oppressive, structural social work values of empowerment, advocacy, social justice, equality, accessibility, participation and collaboration (Hills & Mullett, 2002; Lundy, 2004; Mullaly, 1997; Vancouver/Richmond Health Board, 2001). My skills and knowledge as a social worker have created a strong foundation for advocating for women-centred health and for collaborating on strategies and initiatives that work towards influencing and developing health and social policy that places women at the centre in issues that impact on them, their families and their communities.

Chapter Four

A Review of the Literature

Through this research project, a group of women had the opportunity to experience

the Women North Network and its capacity to offer a meaningful and valuable setting for

women in northern, rural and remote communities in northern BC to consider and address

health and wellness issues. In order to understand the incentive for and foundation for the

WNN, it is important to explore how health and wellness has become a central focus for

women as they mobilize to share information and resources and to take action to collaborate

on initiatives, movements and collective strategies (Alexander et al., 2001; Clarke & Olesen

1999; Ruzek, 1997). To do this, it is necessary to examine, through existing literature, a

women-centred view of health and well-being, and the roots from which it emerged.

Furthermore, an exploration of strategies used by women to challenge existing perspectives

on health and to create an approach to health and wellness that places women's values and

needs at the centre, will be presented.

To understand the electronic strategy used by the WNN to further its goals for

women's health and wellness, it is important to gain an insight into women's affinity for and

use of information and communication technology. In particular, consideration of what

supports and complicates their use of this innovation and ICT is essential. Also of

significance is women's use of ICT to support health and social change initiatives through

efforts that challenge inequality, and demand social justice and empowerment for women.

Furthermore, as this study holds implications for social work policy and practice, it will be

valuable to explore social work contributions to and linkages with issues of health and

wellness as well as to understand the significance of ICT to social work advocacy, community building and social change activities.

Women Networking for Health

Broad definitions of health

Since the early 1970s, the concept of health for Canadians has made significant shifts from the view of health as solely a function of the health care system, to discussions of the factors that contribute to or determine health. This includes developing approaches to promote health that are based on principles derived from those factors. These discussions have shifted from prevention strategies aimed at encouraging people to embrace healthy lifestyles that reduce health risk, to a population health promotion strategy that encompasses a range of health determinants that are fundamental for healthy lives (Public Health Agency of Canada, 2002a).

The founding document, *A New Perspective on the Health of Canadians,* explored how health is created and suggested the concept that human biology, lifestyle, the environment and health care services are all important factors that influence health (Lalonde, 1974). Subsequently, in 1978 one of the first worldwide discussions focusing on the determinants of health was held at *The International Conference on Primary Health Care in Alma-Ata, USSR* where it was recognized that health is "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" (World Health Organization [WHO], 1978, para. 1). According to the WHO (1986), the *First International Conference on Health Promotion* the *Ottawa Charter for Health Promotion* defined health promotion as:

> the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or

group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being.

This Charter has helped to shape the discussions of strategies for the promotion of health, which have resulted in the current focus on a population health promotion approach in Canada.

In 1994, *Strategies for Population Health: Investing in the Health of Canadians* defined nine determinants of health (Federal, Provincial and Territorial Advisory Committee on Population Health, 1994) and more recently the last three were included:

- Income and Social Status
- Social Support Networks
- Education and Literacy
- Employment/Working Conditions
- Physical Environments
- Personal Health Practices and Coping Skills

- Healthy Child Development
- Biology and Genetic Endowment
- Health Services
- Social Environments
- Gender
- Culture

These determinants of health provide the basis for a theoretical framework for addressing health and wellness in ways that are meaningful and effective for all Canadians. This framework recognizes that the determinants of health are interlinked and related and that central to the definition of a health promotion approach "is the notion that these determinants do not act in isolation of each other [and] it is the complex interactions among these factors that have an even more profound impact on heath" (Public Health Agency of Canada, 2002b, para.13). Ismael (2002) suggests a health model that "addresses communities and its constituents . . . conceives of health as an integral component of quality of life" (p.45), and is flexible to respond to the diversity in Canadian communities. It is these contexts for understanding health that are the foundation for the WNN and this research study.

Women-centred health and health movements

Women-centred health and health care includes: respect and safety, empowerment, participation, collaboration, women's ways of communicating, information sharing, gendered research and evaluation, and social justice (Hills & Mullett, 2002; Vancouver/Richmond Health Board, 2001). Women's experience is central and these principles are grounded in a broad understanding of women's health involving all aspects of their well-being. Furthermore, health is influenced by the social, political and economic circumstances within which women live. These women-centred health principles are particularly important in northern, rural and remote communities in BC. Complexities related to violence against women, geographic and cultural isolation, lack of appropriate health services, resource-based economies and lack of access to basic needs further complicate health for women in these communities (Madrid, 2003; Leipert & Reutter, 1998; Leipert & Reutter, 2005). This context and these principles are well-documented as critical features of concern for those working to redefine health and health care for all Canadians.

The underlying premise of gender as a determinant of health is the recognition that "gendered norms influence the health system's practices and priorities" and that "many health issues are a function of gender-based social status or roles" (Health Canada, 2002, para. 13). Although the issue of gender as a determinant of health is a relatively new component within the Canadian government's health promotion strategy, the women's movement has long been active in advocating for a gendered approach to health care policies and practices (Alexander et al., 2001; Brodie, 1996).

Historically, women have challenged the changing and evolving definitions of health and the state of health care through grassroots initiatives, women's health movements and

other collective strategies (Alexander et al., 2001; Brodie, 1996; Clarke & Olesen 1999). They collaborate and coordinate to improve the conditions of women's lives by bringing social justice and empowerment principles to their initiatives (Lock, 1998; Ruzek & Becker, 1999). These initiatives include challenging unequal and oppressive social conditions and health care structures, policies and practices. Furthermore, they reconceptualize the notion of health from that of the focus on prevention of disease to that of health as a complex interaction of multiple determinants and work to politicize issues related to women's health (Lock, 1998; Norsigian et al., 1999; Winnipeg Consultation Organizing Committee, 1994).

Women's health movements have succeeded in bringing attention to issues such as reproductive health, sexuality, environmental and occupational health, menopause and aging, and violence against women. Along with efforts to demedicalize women's health, the women's health movement has also "provided a means for women to work collectively, to determine their own needs, to develop their own responses, and to validate their own experience and understandings of health with a view to promoting it rather than preventing disease" (Lippman, 1998, p. 77). Although there have been some changes, the fundamental issues of concern for women have not changed and women must continue to educate, advocate for and engage in political and social action for change (Norsigian et al., 1999; Ruzek & Becker, 1999). Women persist in their efforts by expanding on the strategies they have used in the past; building upon a foundation of collaboration to establish coalitions and networks that advocate for individual and structural change. They are women networking for health.

Women's health networks

A theme that endures throughout the discussion about women's health, women-centred health care and the development of women's health movements is the notion of ensuring participation, providing accessible information and communication linkages and promoting empowerment through collaboration and coordination (Fife et al., 2001; Kar, Pascual, & Chickering, 1999; Ruzek & Becker, 1999; Winnipeg Consultation Organizing Committee, 1994). Ruzek (1997) emphasizes the importance of collaboration that involves not only health care providers but also community-based women's service providers and women as community members. She also emphasizes the value of sharing health information – a principle that is often lacking through formal health care services.

Through their review of education programs concerning women's health, Fife et al. (2001) found that "[a] common thread throughout . . . is that among the most successful of the outreach activities are those that involve or incorporate existing community groups committed to women's health" (p. 27). Furthermore, they stress the value of collaboration, women-centred research, advocacy and education and suggest that strategies that women utilize at the local level can provide direction for the development of strategies on a larger scale. These important principles of access, participation and inclusion are essential to women-centred health promotion initiatives and to creating networks working towards increased health for women, their families and their communities.

Using technological innovations as a means to communicate and network, in order to provide support for one another and to share information and resources, has a positive impact on women's health (Bresnahan & Murray-Johnson, 2002). Health professionals and policy makers can facilitate women's proactive efforts to inform themselves about health and

wellness by working with women to ensure that health information provided in electronic forms is empowering and available equally to all women (Pandey, Hart, & Tiwary, 2003). The Canadian Women's Health Network (CWHN) supports networking for women's health through utilizing ICT and the internet to increase women's capacity to communicate, share information and empower women to access the benefits of technology (Winnipeg Consultation Organizing Committee, 1994).

Women and Information and Communication Technology

A recent consultation on women and the internet identifies the need for an electronic strategy (Pollock & Sutton, 2003) as part of women's networking activities. Issues related to women's access to and participation in the internet and other information and communication technology must be an integral part of the strategy. ICT must become a priority for women's political and social action agenda (Harcourt, 2002; Huyer & Carr, 2002; Ines, Munevar, & Arrieta, 2002). A strategy for action must link ICT-related activities, such as building a women's health network, to the goal of ensuring that all women have the opportunity for access to and participation in ICT and internet. Identifying and building on existing and emerging strategies that support women's access to and participation in the development of policy and practice related to ICT and the internet is critical to this process. The process is further strengthened by drawing on the individual and collective goals of building community and working towards equality, social justice and empowerment for women (Balka, 1997; Scott, 2001).

In order for ICT such as the internet to become effective *tools* (applications that assist in communication and collaboration) for women and other marginalized groups to redress oppression, there must be opportunities for gender-focused research that explores and

explains ICT as a site for study and acknowledges ICTs as potential data collection and

analysis tools. This new area and means of exploration provides opportunities for creating

new knowledge in new ways (Scott, 2001) while at the same time creating opportunities for

change that are critical to the research process (Zuber-Skerritt, 2001).

Access and participation

Access and participation is a fundamental aspect of information and communication

technology (Pollock & Sutton, 2003). Participation not only means access to the internet in

order to retrieve information, but also access to the means to contribute to the development of

the role of the internet and other ICT in women's lives. Although access to information is an

important feature of concern, participation in the creation of knowledge is critical and only

becomes possible when women are able to interact in the process of retrieving and sharing

information (Scott, 2001). There is a perception that individual inability or lack of desire to

be involved impedes the use of ICT. However, it is widely acknowledged in the literature

that oppression and inequality are significant barriers preventing access to and participation

in ICT. There are considerable divides between those who have access to ICT and participate

in their development, and those who do not.

Digital divide(s)

The literature provides an in-depth discussion and debate[2] regarding the *digital divide*

which is fundamentally the "unequal access to information technology" (Light, 2001, p. 709).

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[2] Some of the literature presents a dichotomy of debates. This is described in Saco (2002) as "the 'technological utopian' position" arguing that "computer networking is revolutionizing society in positive ways" and "the 'technological dystopian' position" which argues that "computer networking, like other modern technologies, is changing society in decidedly negative ways" (p. xv). I have explored these issues in recent papers but a full analysis of those arguments is beyond the parameters of my thesis research. Although I have a decidedly positive attitude towards the value of ICT, this attitude is counterbalanced by a keen awareness of the dangers of a hasty assumption that ICT can be a panacea for a troubled world.

Unequal access is the outcome of a complex interaction of gender issues, power relations and multiple social and political factors that support or deter access to ICT and the internet. There is no single divide, but rather a complicated set of divides that interact and intersect (Eckdahl & Trojer, 2002; Huyer, 1999). These divides do not occur 'just' in *cyberspace* (the space within the internet or computer networks where such things as websites exist and email is transmitted) or 'just' in real space, but rather they occur in both physical and *virtual space* (an environment that exists in cyberspace). They occur locally and globally, replicating and reproducing the same inequalities and oppressions that continue to marginalize and exclude (Escobar, 1999). Light (2001) observes that "powerful political and commercial interests have shaped the ultimate form and uses of technology" (p. 726) and that these have often not been in the interest of furthering social justice and equality. Eckdahl and Trojer add to the digital divide discussion by introducing the notion that the digital divide is a complex set of social and economic factors that separate those who benefit from ICT and those who do not. They emphasize that the gender, cultural, ethnic, social and political power relations that exist in 'real' space, also exist in cyberspace.

A great deal of the literature suggests that the digital divide is gendered. Women have less access to the technology, skills and knowledge required to use ICT (Huyer & Carr, 2002). Women have limited resources necessary to support the use of the internet including economic resources, adequate time to learn skills and then to use them, equal share of computer time in the home and appropriate technical support (Pollock & Sutton, 2003). Factors that impact socio-economic status such as education, age, income, sex, race, employment, and marital status are factors that complicate the gender gap (Bimber, 2000). Geographic location, isolation and disability, coupled with socio-economic factors, further

alienate some women from the prospect of enhancing their lives through access to the opportunities offered by ICT (Pollock & Sutton, 2003).

Women must have an integral role in developing and shaping information and communication technologies (Huyer & Carr, 2002; Light, 1995). Rather than working towards changing ICT so that they are responsive to the needs of women and other marginalized groups, the focus should be on empowering women to create spaces and practices that are consistent with their values and needs. Consequently, they will be creating technology that is responsive to the diverse needs of many people and women will be empowered to use ICT to further their personal and collective goals and to bridge the divides that prevent women's participation.

Bridging the digital divides will involve attitudinal and structural change, which will only become possible when there is formal recognition of the value of ICT and computer technology by all levels of policy makers and organizations (Balka 1997; Spender 1996). Furthermore, it must involve grappling with the challenging issue of how to overcome the financial, physical and geographic barriers to ensuring that each individual has equal access to the ICTs that are quickly becoming the preferred and most widely used form of communication and information sharing. Most importantly, the socio-economic structures and issues that contribute to inequality and oppression must be addressed (Balka 1997; Eckdahl & Trojer 2002; Light, 1995; Pollock & Sutton, 2003; Virnoche, 2001).

Efforts to bridge the digital divides can be enhanced in the process of expanding and building women's networks to organize for change (Pollock & Sutton, 2003). This would include breaking down the barriers created by inequality and oppression, overcoming obstacles that prevent women from accessing, benefiting from and participating in ICT and

supporting women in further developing ICT. This is not something that can be done as an isolated effort focused on ICT only, but rather must be part of the larger social change efforts that challenge these same issues.

Using ICT for health and social change: Existing and emerging strategies

Barriers that complicate and prevent access to and participation in the use and development of ICT are similar to barriers to women's access to health and wellness and to their participation in influencing health and social policy. The collaborative means that women use to redress issues that impact negatively on women's health and to challenge the structures that reinforce the social and political conditions that allow for poverty, racism, sexism, inequality and oppression, have proved to be effective (Balka, 1997; Harcourt 2002; Winnipeg Consultation Organizing Committee, 1994). Feminist strategies to bring about social and political change provide expertise and experience that inform the process of using ICT for health and social change (Harcourt, 2002; Hawthorne, 2001; Huyer & Carr, 2002). These emerging and existing strategies consistently draw and build on women's enthusiasm for taking action to improve their own health and that of their families and communities.

Huyer and Carr (2002) call on women who use ICT in their organizing activities to include an overall goal of promoting equality in women's access to ICT. Providing and distributing information cannot be expected to create change but rather change occurs as women build capacity to engage in the creation of new knowledge from the new information they gain (Scott, 2001). This can only occur if women have access to the resources that empower them to engage in this process of change.

Women have used ICT to enhance their feminist, collaborative, networking activities and have learned that computer and information technology can be incorporated into goals

for bringing about structural and social change at the individual, community and institutional levels (Balka, 1997; Harcourt, 2002; Huyer, 1999). ICT and the internet have become both the sites for women to engage in political and social activism and the tools with which to engage in political and social change activities (Harcourt, 2002; Hawthorne, 2001). They provide opportunities for women to organize and communicate and offer new possibilities for bridging social, economic and cultural barriers.

At present, information and communication technology supports women's networking efforts for improving their health by increasing their capacity to engage in work over vast geographic distances, and to reach larger numbers of women and women-serving organizations (Crandall, Zitzelberger, Rosenberg, Winner, & Holaday, 2001; Ines et al., 2002). ICT will become an even more powerful tool for women and other oppressed groups to create health and social change when these groups have the capacity to create their own spaces and culture in cyberspace (Escobar 1999; Ines et al., 2002; Scott, 2001).

Building online community

Women and ICT would benefit from the creation of places in cyberspace where women could collectively construct and deconstruct technologies to suit their world views and their goals for social change (Escobar, 1999; Light, 1995). Light (1995) suggests that women see technology as a means to increase their capacity to connect with others, to discuss and to organize. She also suggests that the creation of female cyberspace does not necessarily mean that they must be women-only spaces, but rather they can be inclusive communities enriched by a diversity of views that can educate and encourage participation. Spender (1996) agrees with the notion of creating women-centred communities, however, argues that these spaces must be kept private (women-only) in order to preserve women's safety and

voice. Both of these features of online community can be achieved by developing public spaces such as websites; women-only email lists; and private password protected spaces such as discussion forums and chat rooms that are all part of an internet-based strategy for establishing an online women's network (Hemingway et al., 2002).

ICT promotes women's goals of building community for social change by offering opportunities for sharing information, collaborating and strategizing with partnering individuals and organizations and for reaching a large, diverse group of women. It provides a virtual location for coalition building at the local, regional, national and international level (Pollock & Sutton, 2003). Integral to creating networks, coalitions and community is the process of disseminating and sharing information to raise awareness of issues and concerns. Scott (2001) suggests that in order to create change, information must be "grounded, *and used,* within a context of strong relationships, with purpose and direction" (p. 417). Therefore the goal, in building online community is not only to provide information about social justice, empowerment and equality for women, but also to 'create' social justice, empowerment and equality for women.

Two significant features that consistently emerge from the literature related to women-centred health and women-centred health care are social justice and empowerment for women. According to Ruzek and Becker (1999), "[a]n important achievement of the women's health movement was transferring women's health from the domain of largely male experts to women themselves" creating "strategies for empowering women to define their own health" (p. 5). Furthermore, as women take back power over their health and health care, they focus on the social justice concerns of ending poverty, racism, sexism and challenge the structural power relations that reinforce them (Lippman, 1998). When women are

empowered to take action to challenge social justice issues, they will become a force in creating and implementing health promotion strategies.

The Winnipeg Consultation Organizing Committee (1994) underscores the value of women partnering to create coalitions and networks, such as the CWHN. They believe that women's health networks are an indispensable strategy to address policy issues, to overcome the isolation and fear that marginalize women, and to transform fear and anger into social and political action. Furthermore, they suggest that through networking, issues such as vast geographic distances can be addressed, language and cultural diversity can be acknowledged and honoured, while at the same time, poverty and power relations can be specified as major barriers to overcome.

In strategies developed to address women's health issues, there must be a wide-ranging political analysis of health determinants such as poverty and oppression that continue to negatively impact on women's health (Leipert, 1999). There must also be advocacy directed at improving individual women's lives, creating policy that supports women's health and building advocacy networks (Lock, 1998; Norsigian et al.,1999).

A significant concept that must be articulated with more clarity, in literature and research related to women networking for health, is the reality that the focus for women is often to create and implement strategies to improve their health at the individual and community level rather than seeking to influence health and social policy. Although women may be interested in and concerned with influencing policy, they are often caught up in the pragmatic task of striving for improved health in an environment of ever-decreasing funding, services and programs (Hemingway et al., 2002). It is critical that social and political action

aimed at changing policy be grounded in the wisdom and expertise that women have gained from their community building experience.

It is imperative that social workers, researchers and health and social activists be aware of how their own skills, knowledge of and attitudes toward ICT can influence their ability to engage with women in the process of learning about the value of ICT. For some women, ICT may have become increasingly pivotal to their work inside and outside the home or valuable to their information and communication needs. Skills and expertise may have developed gradually as their technological needs evolved or as they gained increasing access to computers and the internet. Consequently, some women may respond favourably to the notion of using ICT in new ways. They may recognize the possibilities for women to influence health and social policy and to take a lead role in the further development of ICT and the internet. However, women who do not have access to ICT are also extremely important to the process of discovering how to engage women and how to ensure participation and access. It may take more effort, care and sensitivity to engage and involve women who have few skills and complicated access to ICT. Eagerness alone will not overcome the fear and anxiety that some women have about using ICT and overly enthusiastic and confident mentors can create resentment and resistance to ICT (Spender, 1996; Virnoche, 2001).

Virnoche (2001) presents a case for taking care when considering introducing ICT as a solution for increasing the effectiveness of networks and organizations. She cautions that without adequate consultation, participation, planning and resources, ICTs can and do complicate matters. As ICT becomes more the 'norm' generally, it is important to think and plan critically about how one utilizes ICT and about who is excluded as organizations and

networks rely more heavily on ICT. Much of the literature does not acknowledge or explore

these aspects of ICT and future research would benefit from including these enquiries.

Social Work, Health and ICT

   Social work contribution to health

   Fundamental social work principles of social justice and social change are consistent

with the principles of the population health promotion approach which, according to the

Public Health Agency of Canada (2002c), endeavours to:

> improve the health of the entire population and to reduce health inequities
> among population groups. In order to reach these objectives, it looks at and
> acts upon the broad range of factors and conditions that have a strong
> influence on our health. (p. 1)

   According to the WHO (1986), the fundamental conditions and resources for health as

emphasized in the Ottawa Charter are:

▪ peace	▪ a stable eco-system
▪ shelter	▪ sustainable resources
▪ education	▪ social justice
▪ food	▪ equity. (p. 1)
▪ income	

The population health promotion approach also recognizes that "access to these prerequisites

cannot be ensured by the health sector alone. Rather, coordinated action is required among all

concerned, including governments (health and other social and economic sectors) non-

governmental organizations, industry and the media" (Public Health Agency of Canada,

2002a, para. 7). Furthermore, according to Raeburn and Rootman (1998), health promotion

builds from the strengths and lived experience of people through individual and community

development with attention to empowerment, social justice, cultural awareness, equity, and

spirituality as they pertain to health for whole populations.

Anti-oppressive, structural social work policy and practice are particularly concerned with the social determinants of health and social workers have the skills and knowledge required to respond to the interrelated issues that arise out of those determinants. The social work profession stands poised to take on a lead role in population health promotion. With its expertise in and framework for working with individuals, families and communities from a strengths-based collaborative approach and its concern for creating policy that promotes social justice and equality, social work professionals contribute significantly to population health promotion in Canada.

Although Health Canada presents a vision of health and health care which recognizes that social, environmental and economic factors play an essential role in determining health, Canada has failed to adequately develop policy or implement programs and services based upon these principles (Lippman, 1998). Lippman emphasizes that structural social change and multi-sectoral health policy are fundamental principles for improved health, while Lock (1998) suggests that social justice is a prerequisite for health.

Social work and ICT

The social work profession has a long tradition of using a variety of approaches to advocate for a compassionate and just society. Practices and strategies have been developed that are effective when working with individuals to promote empowerment and freedom from oppression and when supporting individuals, groups and communities to engage in self-advocacy and social change activities that focus on common issues of concern. Additionally, approaches to advocacy for social change have emerged that challenge political and social structures that result in oppression, inequality and injustice.

Much of the literature reviewed to date that is specifically related to social work and information and communication technology focuses on the internet as a means to gain and exchange knowledge and resources and to aid in finding new ways of communicating with clients (Giffords, 1998). There is also literature that discusses technologies that enhance social work education and training (Coe & Menon, 1999); technology management and improved service delivery for human service organizations (Martinez-Brawley & Delevan, 1993); and impacts of technology on human service organizational structures (Virnoche, 2001). Although these are all important factors to consider for social work policy and practice, they are not of primary concern for this project. What is important is the relatively new area of social work practice using information and communication technology for advocacy, community building and social change activities.

Social work advocacy, community building and social change

A fundamental component of social work practice has been to employ effective communication techniques and tools to provide care, to promote self-help and empowerment and to build community through written and verbal means (Lishman, 1994). Communication has also been a primary factor in bringing about social change through informing, connecting and organizing individuals, groups and communities to address social policy issues. As innovation in communication emerges, social workers have the opportunity to integrate these new developments into established methods (Hick & McNutt, 2002).

In recent years, ICT has provided new ways to enhance social work practice. Computers, fax machines, email and the internet have increased efficiency in record keeping and assessment; provided new ways to support self-advocacy efforts (e.g., the DisAbled Women's Network Canada [DAWN]) and increased the capacity to communicate with and to

provide information and resources to large numbers of people over vast geographic areas (e.g., PovNet). Social workers have the opportunity to utilize ICT to enhance their practice and, at the same time, influence and use the internet as a force for social justice and promotion of community building and social development (Haskett, 2002; Lai, 2002).

ICT is an innovative tool in the hands of social workers as change agents. In this context, social workers are able to use this innovation to link individuals, groups and communities to resources and expertise and also to shape ICT in ways that are meaningful and that meet changing needs (Rogers, 2003). Rogers suggests that there are a range of roles that agents for change can adopt to initiate work with individuals, groups and communities to embrace ICT. These include working to create an awareness of ICT as a valued innovation to address specific issues of concern and to facilitate relationships that support exchange of information. Furthermore, objectives for change can be achieved by linking intent to action strategies that utilize ICT and to foster independence and autonomy in order that individuals, groups and communities can take ownership of ICT as an innovation for accomplishing their self-defined goals.

Chapter Five

Methodology

The *Spinning a Northern Web: Women Using Information and Communication Technology to Network for Health and Wellness* research study examined participant use of the Spinning a Northern Web Interactive Email List (a subsidiary of the WNN Email List created for this study), WNN Website and WNN WebCT Online Gathering Space – the components of the WNN online strategy that are illustrated by Table 1 in Chapter Two.

These features were explored as a setting for women using the internet to communicate with one another, to share information and to collaborate on action strategies. The WNN online strategy will be described in detail through the experiences of the women who participated in the study – in their own words and from their unique perspectives.

This was primarily a qualitative multi-method case study drawing on features of collaborative and action research approaches (Grbich, 1999; Healy, 2001; Patton, 2002). In addition, it used tools of the WNN WebCT Online Gathering Space to provide descriptive statistics about the usage of the various WebCT features. Before providing a detailed account of the procedure for the study, broader questions about qualitative research, case studies and internet online research will be addressed.

Qualitative Study

Qualitative research produces data that are collected through textual and observed situations in their natural setting using processes that describe the event, incident or case. In contrast, quantitative research generates numerically expressed data that is analyzed statistically (Patton, 2002; Sherman & Reid, 1994). Qualitative data originate from three broad categories of sources: interviews, observations and written documents that include

documentation and archival records; direct and participant observations; and physical items (Patton, 2002; Yin, 1994). Multiple methods of data collection in the current study include textual data from email messages, WebCT Discussion Forums, and Live Chat sessions; an introductory questionnaire; participant evaluations at the completion of each phase; focused discussions responding to five central research questions; and researcher observations. These multiple ways of collecting data provide numerous viewpoints and perspectives. In this way validity is increased by providing clarification and support for the interpretation of meanings through triangulation (Patton, 2002; Stake, 2000). Additionally, these methods provide a variety of ways for women to participate and ensure that the process is meaningful and meets their individual needs and preferences; thus, making sense to them within the context of their own experience (Denzin & Lincoln, 2000; Reinharz, 1992). It is not only important to understand the experience of women, but also the unique context within which that experience takes place.

Although the overall methodological approach was that of a case study, the study included aspects of collaborative action techniques for data collection and data analysis that value and heed study participant feedback and perspectives (Grbich, 1999; Patton, 2002; Reinharz, 1992). A bricolage method, described in Patton (2002) as a process that combines "old things in new ways, including alternative and emergent forms of data collection" (p. 402) and analysis was also incorporated. This approach brings flexibility and the freedom to draw from a variety of methods, theory, data collection and analysis in innovative ways. To fully describe and explore the experiential aspects of the WNN as a case, it was important to not only report how women describe their experience of participating in the WNN, but to explore how this new community fits with how they make meaning of community.

Case study

A case study approach to qualitative research provided a structure and a setting for the research (Creswell, 1998; Lincoln & Guba, 1985). The case study has been defined as a research strategy (Yin, 1994), as the final product that describes a phenomenon (Merriam, 1988; Wolcott, 2001) and as a method of data collection and data analysis (Miles & Huberman, 1994; Patton, 2002). There is no definitive agreement about whether "case study" is a methodology (Merriam, 2000) or an approach to analysis (Patton, 2002). It is commonly agreed that in whatever manner case studies may be understood and articulated, they clearly do support compelling descriptions of social settings (Grbich, 1999; Stake, 2000).

For the purposes of this project, a case study approach was used as both a methodology and as an approach to analysis in exploring the Women North Network as a phenomenon. Utilizing a case study methodology allowed for a description of the Women North Network as an example of women using ICT to collaborate on issues related to women's health. This provided an overall strategy for engaging with and describing this unique social setting. This case study can be seen as intrinsic because it involves describing a specific case (Stake, 2000) and as a method that allows for a thorough look at the phenomenon from the perspective of the research participants and the researcher (Marshall & Rossman, 1999).

As an approach to analysis, the case study method supported a process for gathering data that produced an in-depth account of the WNN as an example of women utilizing ICT to augment communication and networking activities. It provided for flexible and inclusive use of all aspects of the WNN as data for analysis by drawing on multiple forms of information

(Patton, 2002). Along with textual data from discussion groups, email and other features used by the study participants, analysis also includes data from participants' visual impressions of the WNN Online Gathering Space (e.g., women-friendly graphics and the 'look' of the site) as well as historical documentation (e.g., Evaluation Report).

A critical dimension in defining a case study is to 'bound' the case in time and space (Grbich, 1999; Merriam, 2000; Miles & Huberman, 1994; Stake, 2000). In this study, the case was bounded within the Spinning a Northern Web Interactive Email List, the WNN Website and the WebCT Online Gathering Space. The study described these specific internet spaces as women communicated and shared information and resources about women's health and well-being over an eight week period. It also described the women's experience of shifting from connecting through the WNN Email List to the more interactive Online Gathering Space.

The qualitative case study encompasses the features that best suited this research project by capturing with vividness and detail, the distinctive ways of communicating and interacting when women come together in this unique way (Marshall & Rossman, 1999). Furthermore, case study method can be combined with other research methods such as collaborative/action approaches in order to understand and describe the experience of women using this tool to address women's health issues (Merriam, 2000). With the aim of describing and examining the unique aspects of the WNN Online Gathering Space, it was important for the research design to remain flexible and open to opportunities for collecting data as they were created through a collaborative process.

Collaborative and action research features

Through collaboration aimed at creating change through action, study participants not only provide information about their experiences and perceptions when engaging in research activities but also have a role in shaping the direction of those activities and nature of their participation. Key features of collaborative, action focused methodology include opportunities for creating knowledge through action and practice (Zuber-Skerritt, 2001). Such features provide for an anti-oppressive environment because the research participants become collaborators with the research (Healy, 2001). Rather than their experiences being merely researched, they may become empowered through the process of being involved in the project. Through this collaborative approach, participants in this project acquired new skills and knowledge about health and wellness for women and about how technology can play a role in their lives. A collaborative, action process is liberating and honours lived experience and genuine partnership (Reason & Bradbury, 2001).

Principles of action learning and research, as explored in Zuber-Skerritt (2001), are founded upon the conviction that "there is no learning/research without action to follow, and no action without a knowledge foundation based on prior learning/research" and that whatever is "conceptualized and learnt must lead to action, improvement, development or change" (p. 12). This study incorporates the principle of action leading to learning, leading to action by being attentive to and responsive to learning as it occurred. The process of the research evolved as participants collaborated on decisions related to topics to be discussed and acted upon, approaches to taking action and ways of developing the WNN that were useful and meaningful to them.

There were opportunities for women to be empowered through the research process. Participants are empowered as they become aware of and increase their understanding of issues with the intent of creating a collaborative positive change (Grbich, 1999). Power imbalances inherent in the relationship of researcher/researched were balanced through the collaborative process. Working towards health and well-being by challenging the determinants that lead to ill health and by recognizing and advancing those that promote and sustain wellness provided opportunities to discover the 'power with' and 'power to' potential in collaborative relationships.

The research was aimed at using real experience to guide a process of change where participants are involved in, and in control of, the process of inquiry and of change; where collaboration between academic and community researchers is valued; and where there is a commitment to facilitate the empowerment of study participants (Barnsley & Ellis, 1992; Morris, 2002; Patton, 2002; Reinharz, 1992). Additionally, collaborative action methods provide opportunities for academic researchers and members of the community to collaborate "in the creation of knowledge that advances community action and change" (Blanck, Ritchie, Schmeling, & Klein, 2003, p.54). Furthermore, collaborative action research is recognized as a means to meet the progressive social work goals of working towards social justice through social change (Healy, 2001).

As study participants moved from the Spinning Email List to the more interactive WebCT Online Gathering Space, there were three elements of action:

1. Participants learned about the Women North Network WebCT Online Gathering Space which provided them with additional skills and expertise in using internet technology.

2. Participants had an opportunity to continue creating the WNN space to include the things most important to them.

3. An activity was chosen by the participants that involved them in using the technology to collaboratively strategize to create social or political change.

The researcher acted as intermediary in creating and developing a collaborative relationship amongst the participants and in the research process by encouraging participants to engage with one another and through introducing participants to features that promote online interaction (e.g., the chat and discussion tools in WebCT). Within this general research design and plan, flexibility was incorporated to be responsive to women's lived experience and to their input and feedback.

Internet Research Methods

In doing research within an internet-based setting, there are advantages, disadvantages, ethical considerations, research design issues and data collection and analysis issues that may be different than doing traditional qualitative research. Since technology is a relative newcomer as a setting for research, it is important that researchers consider including a component in their design that explores how the process of using ICT in their study can inform future studies. Although this study focused specifically on the experience of being involved in the WNN, the broader question of using the internet in research was an integral part of the process.

Using the internet as a research tool has the potential to promote a more diverse participation of people who may have historically been excluded due to geographic location or other barriers (Sixsmith & Murray, 2001). It provides a way for people to participate without having to leave their safe physical environment and without having to meet new individuals face-to-face. However, it is critical to acknowledge any differences in computer access and usage (Mann & Stewart, 2000) as well as variation in skills and knowledge, equipment, software, internet speed, technical support, time resources and beliefs about the

value of ICT and the internet. For the purposes of this study, participants were simply required to have regular access to a computer with internet capacity and have basic computer and internet skills.

Modified Focus Group Process

A range of techniques was considered for this study, including conducting an online survey with current WNN members or face-to-face interviews with the women involved in developing the WNN. However, in the end, a modified focus group technique was adopted. An online focus group structure, that would be ongoing throughout the entire project, was developed for participants to interact with one another and undertake online activities. The focus group setting supports flexibility in the content of and process for asking questions and encourages spontaneous dialogue (Mann & Stewart, 2000). It permits interaction among participants which can enhance the data gathering process; in fact, the opportunity to interact promotes participation (Patton, 2002). Questions are posed to the group to provide a focus for discussion and all participants are ensured the option to respond; furthermore the researcher may interact with participants to clarify, reflect back and check accuracy (Dudley, 2005).

Mann and Stewart (2000) describe types of online focus groups as 'real time' and 'non real time' (synchronous/asynchronous) or a blending of the two. This modified focus group setting supported both real time dialogue and interaction using the live chat feature offered through the WebCT software and ongoing and non real time interaction through email and through WebCT email and discussion tools.

Participants

There are no clear guidelines about how many individuals are ideal for the focus group setting, although the range varies from as few as four to as many as 12 (Dudley, 2005;

Grbich, 1999; Mann & Stewart, 2000; Patton, 2002). The higher end of the range was chosen

for this project in consideration of possible attrition due to unpredictable issues related to

technology and to the many demands on women that may impact on their ability to

participate throughout the entire project. A purposive or criterion, non-random approach to

sampling was employed for this study (Dudley, 2005; Monette, Sullivan, & Dejong, 2005;

Neuman, 2003; Patton, 2002). Through this sampling method, purposeful criteria such as

geographic location, distinctive knowledge or common circumstances may be used when

seeking in-depth information associated with the purpose of the study (Dudley, 2005; Patton,

2002). Criteria for this study required that participants be women from northern BC

communities, who had basic computer skills, and consistent access to a computer and the

internet.

Recruitment materials providing background information on the study and

expectations of participants were distributed through email to the WNN Email News List on

two occasions, two weeks apart. Other networks picked up and further distributed the

message with recruitment and background materials. These included the BC Rural Women's

Network; a provincial community development network; The Well (an electronic newsletter)

by and for women in northern BC, as well as networks that reached out to communities in

Alberta and the northernmost territories of Canada. The information was also offered in

printed paper copy by regular mail upon request. Electronic versions were accessible for

viewing or *downloading* (saving to a computer file) from the WNN website and the WNN

Online Gathering Space.

Over 50 women from communities across the province, and as far away as Rankin

Inlet, responded to the call for expressions of interest in the project. Some asked for more

information, which they received by phone, email or by regular mail. In the end, 42 women confirmed their interest in participating and received a phone call (at their convenience) from the researcher to go over the items on a Spinning Initial Phone Interview Checklist (Appendix B). Some were unable to participate because of geographic location, chronological availability, problematic access to computer and internet or insufficient technical skill level.

The experience of using ICT may vary for women of diverse cultural backgrounds, age, geographic location and socio-economic circumstances (Pollock & Sutton, 2003). This study was limited to conducting a preliminary exploration into women's experience of using the internet to participate in the Women North Network. It was expected that data collection and analysis could reveal specific issues related to culture, age, ability/disability and socio-economic circumstances; however, there was no expectation that all of these features would be represented in the sample of participants. Nonetheless, efforts were made to ensure that a range of women was represented, particularly in terms of geographic location, age, background and the roles they hold in their community.

Ultimately, 12 women living in communities in northern British Columbia were selected and consented to participate in this research project. Initially there were 13 participants; however, one woman withdrew just hours before the project was scheduled to begin leaving no time to replace her. Once selected and a commitment to participate was confirmed by email, a package was sent to each participant by postal mail. The package contained a Cover Letter (Appendix C), an Information Sheet (Appendix D), and an Informed Consent Form (Appendix E) along with a stamped, addressed envelope.

Participants were asked to review the documents in detail and return the signed and dated Informed Consent Form.

The women chosen for the Spinning project were from eight communities located in the region from Prince George north to the Yukon border, west to Haida Gwaii and east to the Alberta border. They all said they had basic computer skills and had consistent access to a computer with internet capacity and all agreed to participate in email and WebCT activities a minimum of 2 to 2.5 hours per week. With the intention of encouraging women to stay current with project activities and to let them know that lengthy sessions were not required, it was recommended that each take part at least once per day in 15 to 30 minute sessions.

Participants ranged in age from 29 to 64 (the participant that withdrew prior to the outset of the research was aged 23). They come from a wide range of circumstances and diverse backgrounds which were described to the researcher during the initial screening interview. Some of the experiences that women brought with them to the project were those related to: coming from First Nations ancestry, becoming older, being lesbian, living on-reserve, living homeless, living with chronic health conditions and disability and dealing with issues related to abusive relationships and lone parenting. There were students, retired women, mothers, caregivers and women involved in paid and volunteer work both in the home and outside the home. They were community activists; poverty and disability advocates; and health care, community services and community development workers focused on issues such as violence against women, employment counselling and mental health. Others either expressed an interest in or worked in the area of addictions, women's health, lesbian health, alternate healing, women's cooperatives, and caregiving and seniors issues.

Research Procedure

The research procedure for this study was planned for a 6 to 8 week time period that

was divided into three phases of data collection. Table 1 in Chapter Two provides the

features of each of the components of the WNN online strategy that were used for data

collection. The first phase took place using the Spinning a Northern Web Interactive Email

List. Direct email between the researcher and participants was also utilized. The second

phase was a transitional stage moving from using email to using the WNN WebCT Online

Gathering Space. The third and final phase was intended to take place solely on the WNN

WebCT Gathering Space. Activities were coordinated by the researcher; however, this was

done with input and feedback from the group through their discussions and their evaluation at

the end of each phase. The researcher periodically summarized and distributed initial

findings; inviting clarification and further input. This was done through email

communication and by posting messages using features of the Online Gathering Space.

With the exception of point one below, all the data for this project was collected by

electronic means. There were a variety of formats utilized including:

1. Researcher observations as documented in a daily journal. Both researcher and
    technical research assistant kept notes about the process as it unfolded.

2. Tracking participant use of the Spinning a Northern Web Interactive Email List and
    any direct email communication between researcher and participants. Interactive
    Email List messages were stored in the UNBC network archives and on the
    researcher's computer. Direct email messages were saved in folders in the
    researcher's home computer.

3. Participant use of various features and tools available in the WNN WebCT Online
    Gathering Space was recorded and stored by the statistical tracking feature in
    WebCT. A final version of the WNN WebCT Online Gathering Space was saved as a
    separate *WebCT shell* (the basic software framework that supports each WebCT
    space) in order to preserve both textual and statistical information gathered through
    the project.

4. Participant use of tools including entering events in the calendar, providing information for the women's profile list, and submitting new topics, information, documents and websites to be added to already existing resources.

5. Responses to the introductory questionnaire, the evaluation at the end of each phase, and the focused discussion of five questions based on the five central research questions.

6. Text from group discussions (e.g., via Spinning a Northern Web Interactive Email List, WNN WebCT Email, Discussion Forum Topics, Spinning: Debriefing Circle, and Live Chat sessions).

The textual and statistical data were downloaded and stored in password protected files on the researcher's computer.

The following is a description of the data collection phases. More details are provided in Chapter Six through the case description of the Spinning a Northern Web project.

Phase 1

During this introductory stage the study participants, all members of the newly created Spinning a Northern Web Interactive Email List received the news items and articles posted to the regular WNN Email List. All messages on the regular WNN Email List are vetted by a moderator. Messages sent to the list by WNN members go only to the moderator, who forwards relevant, current and appropriate messages to everyone on the list. The Spinning a Northern Web Interactive Email List was created using a UNBC Centre for Teaching and Learning Email service. Messages and responses to messages sent to this list went to all research participants with no screening or moderating by the researcher/moderator. Direct email messages were also exchanged between researcher and participants using individual email addresses.

Overall Activities for Participants:

- Check messages on their email a minimum of once per day

- Discuss or comment by email on any articles posted by the researcher or other participants

- Post articles of interest to the list

Week 1 – Activities for Participants:

- Respond to the Introductory Questionnaire (Appendix F)

- Introduce themselves to other participants through an email message.

- Describe in an email message the things that are important for women to be healthy and well in their community.

Week 2 – Activities for Participants:

- Suggest a topic on health and wellness of particular importance to women in their community

- Respond to emails sent by other participants

- Comment on useful ways of responding to women's health and wellness issues and report how their communities currently respond to these issues

- Phase 1 Evaluation. Reflect on the previous two weeks activities and comment on:

  - One thing that they liked the best
  - One thing they didn't like
  - One thing that they would like to see done differently
  - Any other comments they wish to make about the process to date

Phase 2

During this transitional stage, participants shifted from using the Spinning a Northern Web Interactive Email List and direct email to learning to use the WNN Online Gathering Space. The procedure incorporated feedback and suggestions for changes that were made in the previous stage through the women's observations and discussions and through the evaluation at the end of Phase 1. The research technical assistant provided each participant with a WebCT username and password that identified them as a *Spinner*. Brief instructions on how to access the WNN WebCT Online Gathering Space were provided through an email

message from the researcher. Instructions, with a link to a tutorial on the WNN Website, were included.

During this transition period, women were asked as much as possible to provide assistance to one another via the Spinning Interactive Email List or the Spinning: Debriefing Circle – a topic created on the Discussion Forum feature in the Online Gathering Space. Participants were also made aware of the ongoing help available to them through the project research technical assistant. The researcher continued to send messages with updates and instructions through external email, while at the same time using features in the WebCT space to post this same information.

More detail about Phase 2 is provided in Chapter Six through the case description of the Spinning a Northern Web project.

Ongoing Activities – carried forward from the Introductory Phase

- Utilize the WebCT Discussion Forum to continue dialogue about specific issues raised in Phase 1

Week 3 – Activities for Participants:

- Once logged in, the researcher posted a WebCT internal email greeting to each woman asking them to send an email to the other Spinners (brief instructions were provided along with a link to the WebCT Email tutorial).

- By means of a WebCT email message from the researcher, participants were prompted to post a message to the Spinning: Debriefing Circle discussion topic. The option to post anonymously was offered.

- Via an email message the study participants were given the option to submit the required information to complete their profile in the Women's Profile List (a tool on the WebCT Online Gathering Space through which WNN members record information about themselves and their interests). They were asked to find their Spinner identity in the list and, to ensure anonymity, had the option to provide as much or little information as they wished.

- Participants were asked to explore the Online Gathering Space and to post questions, comments and concerns to the Spinner Debriefing Circle forum.

Week 4

It was intended that at this stage, the women would be asked to confine their interactions to the WebCT space only. However, in order to be responsive to participants progress, messages about the activities continued to be sent by external email, by the WebCT email, and were posted on the WebCT Discussion Forum and on a list of research activities on the Spinning a Northern Web WebCT page. All news items and articles normally posted as email messages were posted to the WebCT Online Gathering Space in various forms (i.e., discussion postings, links to documents and websites, direct email messages, community events calendar).

Activities for Participants:

- Continue activities from the previous week (i.e., posting to topics in discussion forum, and directing questions, comments, concerns to the Spinning: Debriefing Circle)

- Post an event to the community events calendar

- Submit an electronic document, website address or suggestion for addition to the Women's Health & Wellness Resources list on the Online Gathering Space home page

- The Phase 2 evaluation was sent by direct email to participants and was also available using the quiz[3] feature on the WebCT Online Gathering Space. Spinners were asked to reflect on the activities of transitioning from the external email list to WebCT and comment on:

  - One thing that they liked the best about moving to WebCT
  - One thing they didn't like about moving to WebCT
  - One thing that they would like to see done differently
  - Any other comments they wish to make about the process to date

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[3] The quiz tool in WebCT was one of the ways that the Phase 2 evaluation was made available to participants. It was utilized as a way to offer the participants the opportunity to try out a feature of the WebCT that they had not previously had the opportunity to use. In a similar fashion, the survey tool in WebCT was utilized for the Phase 3 evaluation as a means for women to experience its use.

Phase 3

During this final stage, participants learned more about using the tools provided within the WNN Online Gathering Space and also continued activities from the previous phase. They were asked to plan a strategy to address an issue arising out of their discussions thus far, using this space to harness their collective energy and to begin discussing the five central research questions.

Week 5 – Activities for Participants:

- Continue activities from previous weeks (i.e., discussion of topics, submission of resources, messages to Debriefing Circle)

- Submit ideas for taking action on one of the issues discussed over the past few weeks to a new discussion forum topic, Spinners Taking Action. This forum topic would be focused on something the group could do together – using the WNN Online Gathering Space – to take action (e.g., collective letters to local, provincial and federal levels of government – templates of letters to be downloaded, etc.)

Week 6 – Activities for Participants:

- Organize a real time discussion using the WebCT Live Chat feature

- Continue planning the action strategy

- Begin a focused discussion on the Spinners Research Questions to Explore topic in the WebCT Discussion Forum, responding to the five central questions of the study (Appendix G) that also reflected information and issues raised by participants throughout the project

- The Phase 3 evaluation was sent by direct email and WebCT email to participants and was also available using the survey feature on the WebCT Online Gathering Space. Spinners were asked to reflect on the activities and comment on:

  - One thing that they liked the best about participating in this project completely online
  - One thing they didn't like about it
  - One thing that they would like to see done differently
  - Any other comments they wish to make about the process to date

Week 7 & 8

In recognition of the often busy lives of women and their multiple roles and responsibilities, week 7 and 8 were included in the design of this project in order to allow women extra time to complete the activities and discussions, if required. There were no extra activities assigned for these weeks.

Data Analysis

Within an overall structural social work, women-centred, health promotion framework, a thematic analysis method was chosen. This method provides a means to gain a multifaceted understanding of the values and perceptions that underscore the lived experience of individuals (Luborsky, 1993). It is a way to organize and understand the essence of qualitative data by identifying similarities in meaning that can then be categorized into themes and patterns (Patton, 2002). Discovering and organizing the essence of what is said by study participants into themes and patterns brings a "structure and coherence, a sense of order" (Luborsky, 1993, p. 191) during the analysis process. Furthermore, it assists in recognizing important common characteristics within and between categories, themes and patterns. Engaging in thematic analysis requires that the researcher repeatedly read and review the data in detail, thus "living with" (Kirby & McKenna, 1989, p. 150) the data and becoming immersed in the experience of participants. This is a way of ensuring that the interpretations reflect the context and significance of participants' words and that the analysis is consistent with the way that they perceive their experiences (Luborsky, 1993).

Thematic analysis is a practical method to utilize when dealing with a large amount of textual data that comes from a number of sources (Dudley, 2005). This is particularly useful in this study because the procedure supports data collection in a variety of ways. Participant

use of the various tools for communication, discussion, sharing information and planning for action provides the information for describing the WNN as a process for addressing and organizing around women's health concerns. The experiences of the women are explored by drawing on participants' own words and perceptions to describe their understanding of and familiarity with the WNN online components.

The process of the analysis is guided by the social determinants of health and their interrelated dynamics (Wilkinson, 1999) offering a context for considering the structural issues related to health and to women's ways of responding to those issues. The analysis further draws on features of women-centred health and health promotion. Additionally, the linkages between health promotion and social work principles contribute to the foundation for analysis. Finally, implications for health and social policy in northern, rural and remote communities, together with the significance of progressive, structural, anti-oppressive social work theory, policy and practice are considered.

A coding technique was developed to categorize the content of the data across participants and across data sources. Coding is the procedure for structuring the data into manageable segments by condensing it, while at the same time retaining its central meaning and context (Monette et al., 2005; Neuman, 2003). An open coding method involves grouping the content of the data into categories as various themes and patterns emerge. This is accomplished by watching for how things fit together in a significant way and noticing frequent similarities (Patton, 2002). As relationships within and between coded categories, themes and concepts become apparent, core concepts emerge. These core concepts provide a basis for describing the WNN as a way for women to address health and wellness and their experiences while using the WNN online strategies.

In the spirit of remaining true to the process of this study and its focus on electronic and online innovation, it is critical that ICT is involved in all aspects of the research including the analysis process. Use of NVivo Qualitative Software or other computer-assisted qualitative data analysis tools to facilitate the coding and analysis process was considered. However, as an alternative, features within computer word processing software were utilized. Familiarity and experience with word processing supported me to develop a customized method for assisting in analyzing the data.

Coding into categories and themes was accomplished by using a word processor to tag and retrieve the text of meaning units (Ryan, 2004). A process for labelling and retrieving textual data was developed by drawing on information found in Ryan (2004) and with assistance from Lynda Williams at the UNBC Centre for Teaching and Learning. The text attributes of bold, italics, underline, shading, strikethrough and the colour red were used to code the data. The *Find* option on the word processor was utilized to search for and highlight all text of a particular attribute. The text was then copied and pasted to a new document. This process was used iteratively to first code data into broad categories and then to code the resulting cluster of data in each category into themes. Features of themes were then further coded using this same method.

It is important to note that the use of technology cannot replace the analytic value of the human contribution of the researcher (Patton, 2002). The process that was developed allows for a great degree of researcher contribution to the analysis and coding of the data because it was created specifically for this project and explicitly tailored to my understanding of and skills in using the word processing software.

In Search of Rigour in Qualitative Research

There is much debate in the literature regarding issues of rigour in qualitative

research (Caelli et al., 2003; Davies & Dodd, 2002; Koch & Harrington, 1998; Morse,

Barrett, Mayan, Olson, & Spiers, 2002; Sandelowski, 1986). In recognition that the "debate

surrounding the methodological rigor of qualitative research is confounded by its diversity

and by lack of consensus about the rules to which it ought to conform" (Sandelowski, 1986,

p. 29), I will draw on some of the key points from the literature that supported rigour within

this research study rather than itemizing and discussing these debates in detail.

There is a plethora of terms and concepts related to rigour in qualitative research; too

many to describe and define within the limits of this discussion. One of the key concepts in

valid, credible research, that relates back to the discussion of my standpoint, is the notion that

the "research is only as good as the investigator" (Morse et al., 2002, p. 10). Building on the

earlier discussion of my stance as a learner with a mindful approach and the exploration of

my analytic lens, it was of critical importance to draw on my strengths of flexibility,

creativity, attentiveness, empathy, respect and so on, to guide my attention to matters of

rigorous research (Davies & Dodd, 2002; Morse et al., 2002). Additionally, the features of

the methodologies chosen for the study are congruent with my values and with my

understanding of what is important to the women in this study, thus providing further

credibility (Caelli et al., 2003). Upon this foundation of attention to rigour throughout the

research process and through the methods proposed, other concrete strategies are also

important.

Triangulation is a process of ensuring validity in qualitative research through the use

of multiple sources of data and multiple methods for collecting and analyzing data (Merriam,

1998; Patton, 2002). The triangulation process provides a range of perspectives for viewing the case being explored. In this study, sources of data include an introductory questionnaire, evaluations at the end of each phase, focused discussions, participant feedback, researcher observations and numerical measures of the rates of participation. The multi-methods approach utilizing qualitative case study and collaborative, action approaches along with quantitative descriptive statistical methods, further enhance validity.

A rigorous approach to collecting and analyzing the data necessitates congruence with the commitment to a collaborative process and honouring women's voices (Caelli et al., 2003). In this study, periodically returning preliminary findings to participants, inviting feedback and comments allows them to impact subsequent activities and procedures. Through verifying with the women that the research process and preliminary findings are meaningful, the researcher is able to "identify when to continue, stop or modify the research process in order to achieve reliability and validity and ensure rigor" (p. 10).

According to Davies and Dodd (2002), in order to maintain rigorous standards in qualitative research, ethics and ethical issues must be interwoven throughout the process rather than considered as separate issues. The purpose of the exploration of my standpoint as researcher and efforts to make the research process transparent and accountable is indicative of this principle. However, there are issues and concerns that must also be addressed to underscore ethical research practice in this study.

Ethical Considerations

The principles upon which this research study rests are in keeping with the current *British Columbia Association of Social Work Code of Ethics* (British Columbia Association of Social Workers, n.d.) which broadly provides guidelines for ethical social work practice.

This study also adheres to principles described in the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (Medical Research Council of Canada, Natural Sciences and Engineering Research Council of Canada & Social Sciences and Humanities Research Council of Canada, 2003). Moreover, the fundamental ethical practices that underpin my research draw on my attention and commitment to women-centred, anti-oppressive principles.

Ethical approval for this research was obtained from the UNBC Ethics Review Committee. Research participants received an Information Sheet (Appendix D) that provided an overview of the nature and scope of the project and were asked to sign an Informed Consent Form agreeing to participate (Appendix E).

Important ethical issues to consider when engaging in online activities proposed for this study include privacy, confidentiality and informed consent (Mann & Stewart, 2000; Sharf, 1999). Privacy and confidentiality are addressed by providing research participants with the opportunity to reply or post messages anonymously to the Spinning a Northern Web Interactive Email List, as well as to send private communications to the researcher through direct email. Furthermore, each participant received a generic user identification within the WNN Online Gathering Space. The option to post anonymously to discussion forums was available and clearly explained through an email message and a tutorial. Participants had the option to provide whatever information they wished when interacting on the email list and the Online Gathering Space. Specific issues related to participating in this online research were clearly defined within the Informed Consent Form and Information Sheet.

Data that was downloaded to the researcher's computer was password protected and any printed hard copies were kept in a locked file cabinet in the researcher's office.

Chapter Six

The Case: Spinning a Northern Web

One of the important aspects of a case study is to bound or define its boundaries in time and space (Grbich, 1999; Merriam, 2000; Miles & Huberman, 1994; Stake, 2000). The case: Spinning a Northern Web was conducted from October 4 to November 29, 2004. It was enclosed within the WNN internet based online components (see Table 1): the Spinning a Northern Web Interactive Email List, the WNN WebCT Online Gathering Space and the WNN Website. Direct email between researchers and participants was also utilized. The proposed procedure was described in detail in Chapter Five; this case description describes the day to day happenings as the procedure was implemented.

The data collection for the Spinning a Northern Web project was conducted over the full 8 week time period and was divided into 3 specific phases. Phase 1 took place using direct email between researcher and participants and the Spinning a Northern Web Interactive Email List. Phase 2 was a transitional stage moving from primarily using email to the WNN WebCT Online Gathering Space. The third and final Phase was intended to take place solely on the Online Gathering Space; however, email messages continued to be a valued resource for communication so were also utilized during this time.

In preparation for the project, a link to information about the Spinning a Northern Web project was created on the WNN Website to ensure easy, convenient access for participants to locate information. The information included the purpose and goals along with a link to tutorials that guided the process of learning to log on and to navigate the WNN WebCT Online Gathering Space. Links to new information and resources were added to the website as the project evolved.

The following is a detailed description of the process as it unfolded through each of the three phases:

Phase 1

The project began on Monday, October 4, 2004. Two messages were sent by the researcher directly to each participant. The first welcomed them to the project, providing an overview of the planned activities and informing the women that they would receive a number of direct email messages from the researcher to afford confidentiality in responding to an introductory questionnaire and the evaluations. They were also advised that the Spinning a Northern Web Interactive Email List would be used for communication amongst the entire group. The second direct message contained the first activity; an Introductory Questionnaire (Appendix F). Responses to this questionnaire provided information about how participants currently use the internet and were viewed only by the researcher.

The following day, participants received a welcome message providing details about the Spinning Interactive Email List. Participants were encouraged to check their email at least once per day. They were also invited to comment on news items and to post any news they wished to share.

The second activity gave directions for participants to use the Spinning Interactive Email List to send a message introducing themselves to the rest of the group. They were asked to identify themselves in the subject line either with an alias or by using their first name. They could also include their age, time living in the North, information about their community and background on themselves. The third activity during the first week followed a similar procedure and asked the Spinners to comment on the things that they felt were important for women to be healthy and well in their community in particular and in northern,

rural and remote communities in general. Participants were also encouraged to reply to and comment on issues as they appeared in the conversations.

The information assembled from the discussions and activities during the first week provided a context for the activities in the following week. The first activity during the second week was for women to identify specific issues that were of concern for them; topics that would form the basis for discussion over the remainder of the project. In order to gain input and feedback from participants, the researcher compiled a list of issues that had been raised thus far in the project. This summary was sent to the women along with a request for them to review the list and to specify any of those or other issues that were of particular importance to them or to women in their community. During these discussions, Spinners also began to specify some of the strategies used in their communities to address issues.

An update was circulated to provide a context for the second activity in week two. The message contained a general overview of the strategies for addressing issues and the concerns that the women had identified to date. The Spinners were then asked to send a message describing the specific health and community services and programs or initiatives that have a positive impact on women's lives in their community. They were advised that they could also include some of the unique qualities of their communities that support women's health and wellness. The final activity for Phase 1 was to complete the evaluation that was sent out by direct email to each individual participant.

All participants were engaged in some of the activities during the first phase. They appreciated hearing more about one another and raised many issues that were of concern for them and other women in their communities. At times, they referred to information or resources that were accessible through the internet such as an FASD support group and the

PovNet website. Whenever possible, these were added to the Spinning a Northern Web page on the WNN publicly accessible website.

There were some minor technical problems with sending and receiving messages and these were quickly resolved with support from the researcher and her research technical assistant. Overall, participants were pleased with the process to date, however there was some consternation over the number of email messages being received. There was also confusion about which messages were original messages and which were replies to messages as well as uncertainty about who was sending and replying to the messages. Attempts were made to address these issues during the transitional Phase 2.

One of the participants began having difficulty with her access to a computer and the internet. The researcher kept in touch with her because she had expressed an interest in continuing if her access was restored. However, she did not participate in any of the activities after she had completed the introductory questionnaire, leaving 11 women involved in the final two phases of the project.

Phase 2

In preparation for the women to begin using the WNN WebCT Online Gathering Space as a means to communicate and find and share information and resources, a Spinning a Northern Web page was created. This *organizer page* is similar in function to a homepage and is accessed through a link on the main WNN WebCT Welcome homepage (Appendix A). It was specifically designed for this research project and provided convenient links to resources, features and tools. The Spinning page contained links to the tutorials, the Spinning: Debriefing Circle and the Spinner's To Do List of Research Activities *content page* – a page created in WebCT that supports a Table of Contents itemizing links to other

pages and documents. It also provided a link to the Spinners Favourite Links and Documents content page. The items on the Spinning organizer page continued to develop as the project progressed. The UNBC Centre for Teaching and Learning provided a copy of a general WebCT How To Library that was accessible to participants on the Spinning a Northern Web organizer page. This was intended to be a supplement to the tutorials.

The first message sent to the Spinners at the beginning of Phase 2 provided them with a summary of and response to the feedback and recommendations made through the email discussions and the evaluation at the end of Phase 1. Some suggestions made to improve the interactive email process were highlighted such as identifying topics, sender and date sent in the subject lines of original messages and replies. Participants were also reminded that they were not required to read and reply to all messages but rather to follow along with topics that were of interest to them. They were also assured that messages from the researcher would be clearly identified and dated.

In order to encourage participants to shift discussions that had begun on the interactive email list over to the WNN WebCT Online Gathering Space, all messages during the first two weeks pertaining to specific heath and wellness issues were compiled by the researcher. The compiled messages were then posted to the Discussion Forum in the WebCT space. A Discussion Topic item for each issue was created with a title beginning with 'Spinning' so it would be easily identified. These topics were 'locked' so that only those involved in the Spinning a Northern Web study could participate. The option to post anonymously was provided. The first message for each topic was from the researcher and contained the compiled messages from email discussions to date. New Spinning topics were created as new subjects emerged or as requested by participants.

Each participant received a Spinner username and password by direct email from the researcher. The message also contained detailed instructions for finding and logging on to the WNN WebCT Online Gathering Space. A link to the tutorial was available on the publicly accessible WNN Website. Continued use of the interactive email list was encouraged. The women were advised to post messages to the Spinning: Debriefing Circle Discussion Forum topic to ask questions and share their experiences of learning how to use the WebCT Online Gathering Space. They were asked to support one another by making suggestions or responding to queries as they arose. They were also asked to comment on and make recommendations to improve or further develop the tutorials.

The first activity in the transitional phase was to log on to the WebCT Online Gathering Space and to send a message to all Spinners using the internal WebCT email system. A tutorial detailing the functions of the WebCT email was made available to them. A message from the researcher was sent through WebCT email to each woman welcoming her. Participants were encouraged to explore the WNN WebCT Online Gathering Space and begin using it as the primary means for communication and completion of activities.

As each participant logged on and sent an email using WebCT internal email, they received a message back from the researcher asking them to go to the Discussion Forum and post a message to the Spinning: Debriefing Circle topic. Instructions on how to find and retrieve the tutorial detailing the functions of the Discussion Forum tool were included. A third optional activity involved the women submitting information to complete their Spinner profile on the WNN list of member's profiles on the WebCT Online Gathering Space. Willing participants were asked send a WebCT email message to the research technical

assistant with demographic and background information about themselves that they were

prepared to share with others under the following headings:

- Organization or Affiliation
- Role
- Interests and Skills Offered
- Personal Interests and Skills
- My Story
- Education
- Computer Skills
- Interests or Concerns

The research technical assistant entered their information on the profile list.

Throughout this phase, the researcher continued to send out the instructions for

activities to the Spinning a Northern Web Interactive Email List. This was intended to

remind and encourage participants to log on to the WNN WebCT Online Gathering Space

and to join in on activities. The women were also notified that the content of their email

messages relevant to specific topics had been relocated to the Discussion Forum area of the

WebCT Online Gathering Space. They were encouraged to continue posting messages using

that format whenever it was convenient to do so. As participants began to log on and use the

WebCT space, the researcher shifted to providing details about activities in multiple ways

through WebCT internal email, Discussion Forum and the Spinner's To Do List content

page.

At the end of the first week of the transition phase, it became apparent that some

women would need more time to learn how to use the features available on the WNN

WebCT Online Gathering Space and to participate in the activities. The researcher, in

consultation with her thesis supervisor, added a third week to Phase 2 to accommodate the

women's busy lives and schedules and to ensure that they had the opportunity to contribute

to the process in ways that were convenient to them.

Over the next two weeks, four other activities were offered for participants to

consider. They were asked to explore the Women's Health & Wellness Resources A – Z list

by clicking on the appropriate *icon* (a small picture or symbol that points to another page, feature or document) on the WNN WebCT Online Gathering Space home page (Appendix A). In order to suggest new topics or to provide up-to-date links to websites and to share other fitting resources, Spinners were asked to post messages to the Spinning: Websites and Other Resources topic in the Discussion Forum. They were encouraged to use the tutorial to help them to add attachments to their messages. Instructions on how to include links to websites were provided. The women were also invited to explore the Community Events Calendar by clicking on the appropriate icon and to use the tutorial to guide them in adding events from their own communities.

The option to take on the role of designer was offered to participants who felt they would like to try something new. In the role of designer, they would have the capacity to add to, edit or create content on the Women North Network Online Gathering Space as well as customize its look (e.g., changing colours or adding new icons). They were advised that in future there will be a number of WNN *Designing Women* (a title created by WNN network members) across Northern BC who will continue to build and develop the Online Gathering Space. By exploring this role, participants would be in an excellent position to provide feedback on what would be helpful to support women who may want to take on this role in the future. Any women interested in this option were asked to post a message to the Debriefing Circle discussion topic. They would then be provided with a designer username and password and would be mentored through the process of learning new skills and taking on an active role in creating and recreating the WNN online space.

A technical problem with a participant's access to WebCT arose when giving her a new username and password in order to try out her new role as a designer. A UNBC

technician was willing and available to assist in solving this problem. An action was taken that resulted in the temporary loss of some information tracked through WebCT. The bulk of the data was recovered; however, a small part of the statistical data was lost. This did not result in any changes to the content and visual presentation of the Online Gathering Space or to messages posted to the internal email and discussions.

On October 29, the Phase 2 evaluation was made available through a Quiz tool in WebCT. A Spinning Evaluation icon was created on the Spinning a Northern Web organizer page. Once a participant clicked on the evaluation 'quiz', detailed instructions were provided. For a time, the evaluation was only available in this manner. Participants were later notified that it was available in a number of other ways (external email, WebCT email, and in the WebCT Discussion Forum). During the following week, the evaluation was also sent to each participant through direct email. The researcher alone was able to view responses to evaluations. Organizing a real-time chat session using the Live Chat feature in WebCT was scheduled as activity for Phase 3. However, a participant spontaneously organized several chat sessions during the final week of Phase 2.

Throughout Phase 2, the researcher continued to communicate with participants by direct email and replied directly in a timely manner to questions and concerns. One-on-one phone assistance was offered. Messages went to all participants in a variety of ways both by email and through the WebCT features.

The participant that had developed technical difficulties early on in the project did not participate or respond to messages during Phase 2. Another participant reported that critical personal issues were interfering with her ability to participate. She indicated that she would continue to contribute to the project when possible. The researcher made efforts to ensure

that she was kept up-to-date. As Phase 3 began, one of the participants withdrew from the

project. She reported that she felt overwhelmed by email messages and was having difficulty

logging on and using the features offered through the WNN WebCT Online Gathering Space.

For a variety of reasons, this participant was not available to access one-on-one phone

support. Ten participants remained.

Phase 3

In response to feedback about issues that arose for participants during the transitional

stage (gleaned from ongoing email and WebCT discussions and the evaluation at the end of

Phase 2), the following message was posted prominently in large text under "Welcome

Spinners" on the WNN WebCT organizer page (Appendix A):

> This is the Women North Network Online Gathering Space. Please click on 'Spinning
> a Northern Web' below to find out more information and resources. You will find
> links to Discussion Forum Topics, Research Activities, Tutorials and 'How To's'

It had become evident that there was some confusion about the difference between the

publicly accessible WNN Website and the password protected WebCT Online Gathering

Space. The researcher sent out a message through email and through the WNN Online

Gathering Space to explain the difference between the two. Each message included a

clickable link directly to the website and a clickable link directly to the log on page for

WebCT to help to clarify the difference.

A Phase 3 introductory message provided a context for the planned activities in the

final stage. It included a summary of community issues, services and service gaps that the

participants had identified and discussed to date. The message underscored the project goal to

explore how women might use the internet to help bring about positive change in their

communities and in northern BC. It detailed one of the primary activities for this final phase

which was to explore how the Spinners might use the Women North Network electronic

strategies to take action to raise awareness of an issue and to voice concern and protest about

a specific issue or issues. A Spinning: Taking Action discussion forum topic was created and

participants were invited to post messages with their ideas and to comment or build on

suggestions made by others.

Several initiatives for action were brought up and debated. Discussions through

email, the discussion forum and during live chat sessions were animated and detailed. The

Spinners involved in these discussions decided to concentrate their planning on one particular

idea. This action strategy focused on sending 'heartfelt' messages from the 'heartland' (a

term coined by the BC Liberal government for the rural and northern regions of the province)

to those in power. The idea arose out of concern that the government was not hearing the

voices and concerns of its non-urban citizens and, as a result, was not meeting their needs.

Some ideas for initiating and implementing the strategy in various communities were

explored. A draft version of a one page informational flyer was generated and shared with all

participants for feedback and revisions. This was done using the various options provided by

the WebCT space. Planning for this continued until the project ended and has continued on

since then.

At the end of the first week of Phase 3, the researcher sent a message asking for input

and feedback from participants. Although the intention during this phase was to limit

communication to the WNN WebCT Online Gathering Space, in response to Spinner

requests, the researcher continued to send messages containing reminders and details about

activities through direct email that was external to WebCT. Updates were also provided to

two participants who were experiencing barriers to their ongoing involvement in the project.

The second major activity for Phase 3 was for the participants to create a dialogue about or respond to the five central questions asked through this research project. A discussion forum topic was created for this purpose. The five basic questions as stated in the proposal were amended to reflect the women's experiences and presented to participants within a context of the project as it had unfolded (Appendix G). The questions were also provided to participants through direct email outside of WebCT, email within WebCT and on the Spinners Research Activities To Do List.

The last activity for the final stage and for the project was to complete the Phase 3 evaluation. It was made available during the final week using the survey tool provided through WebCT. Participants could complete this evaluation by clicking on the Spinning Evaluation icon on the Spinning a Northern Web organizer page. Once a participant clicked on the evaluation, detailed instructions through the WebCT survey feature guided them. The evaluation was also made available through direct email outside of WebCT, through WebCT email and on the Spinners Research Activities To Do List. Responses to this evaluation were not available for viewing by anyone other than the researcher.

Phase 3 was extended by one week in order for participants to have the opportunity to complete all of the activities. Upon completion, the researcher sent a message to each individual participant, thanking them for their participation.

Chapter Seven

Results of Data Analysis

This project generated an enormous amount of rich textual data about the

experiences of women using ICT (through the Women North Network) to focus on health

and wellness issues in northern, rural and remote communities in BC. The WNN supports

collaboration and coordination among women in these communities. In addition, it provides

an electronic, online means for women to disseminate health and wellness information, share

resources and strategies, and take action to influence health and social policy and service

delivery. For the purposes of this thesis report, the data analyzed is related to the women's

process of learning about and taking part in the WNN online electronic strategy. The data

was drawn from email messages and the WNN WebCT Online Gathering Space activities

and discussions. The voice of women, expressed through this project, provides an

understanding of what is practical, meaningful and supportive for women using ICT and the

WNN electronic strategy. The wealth of data about women's health and wellness will

provide a descriptive context for the analysis and discussion but will not be reported in detail

at this time. Statistical information related to women's participation on the electronic

components of email and the WNN WebCT Online Gathering Space will provide further

descriptive context for the project.

Preliminary data analysis was undertaken on an ongoing basis during each of 3

phases of data collection. Exploring general themes ensured that the process of the

subsequent phase was consistent with the women's experience and perceptions. The intention

was to make certain that activities within each phase were responsive to what the women

were saying about their current experience. This initial analysis was shared with participants

through an email message as a way to involve them in reflecting on the process of the

previous phase and generating ideas to be explored in subsequent phases. Suggestions from

the women provided specifics about how the process could shift to meet their needs and to

assist them in participating in a more meaningful way.

The sources of the qualitative electronic data during each phase are summarized in

Table 2 below. Postings were downloaded daily by the researcher and saved to password

protected files and folders.

Table 2

Sources of Qualitative Data

Phase 1	Phase 2	Phase 3
• Introductory questionnaire • Interactive email discussions • Direct email messages • Phase 1 evaluation	• Interactive email discussions • Direct email messages • WebCT Discussion Forum postings • WebCT internal email messages • Phase 2 evaluation	• Direct email messages • WebCT Discussion Forum postings • WebCT internal email messages • Live Chat Discussions • Action planning discussions • Responses to five central research questions • Phase 3 Evaluation

Once the data collection phases were completed, the researcher meticulously

retrieved and organized the wealth of textual data from the Spinning a Northern Web

Interactive Email dialogue, from direct email messages and from the WebCT Online

Gathering Space. This included the messages from internal email, discussion forum postings

and text dialogue from chat sessions. Evaluation responses were also retrieved from direct

email messages and from the WebCT quiz and survey 'tools'. A password protected archival

copy of the Spinning a Northern Web Interactive Email List messages was preserved on the

network at UNBC. Messages had been downloaded and reviewed for initial analysis at the

end of each day while it was in use. Direct messages sent to and received from participants

through the researcher's email were saved to weekly files in email and were also copied and

pasted as text to documents on the researcher's computer.

Twice during the research process, the WNN WebCT Online Gathering Space was

preserved by creating backup copies at a critical point during the project and again at the end

of the project. These backup copies are accessible only to the researcher. All relevant text

from these backup copies was downloaded to or copied and pasted to documents on the

researcher's word processor.

Qualitative Thematic Analysis

An abundance of textual data was reviewed in detail to determine the significant and

meaningful content. An iterative process of classifying and organizing the data with similar

features into concepts, themes and categories was undertaken. Contemplation of the five

major questions posed by this study guided the process of understanding how the collective

information from participants 'speaks to' the women's experiences and the process of the

WNN online strategies addressing women's health issues (Creswell, 1998; Monette et al.,

2005; Patton, 2002).

Upon organizing and reviewing the qualitative data, it was found that four broad

categories correspond with the topics suggested by the five questions that were explored

through the research. A further category describes themes related to health and wellness as a

motivating factor for women to participate in the WNN. Table 3 provides an overview of the

all categories and related themes identified.

Table 3

Categories and Themes

Category 1: Supports	Category 2: Gains	Category 3: Barriers	Category 4: Supports Action	Category 5: Health Focus Motivating
■ Valued feelings ■ Supportive relationships ■ Sense of community ■ More time ■ Coordinator ■ Up-to-date technology ■ Technical support and training ■ Aids to "navigating"	■ Valued topics ■ Valued resources ■ Women are a source of information and resources EMAIL ■ Uncomplicated WEBCT ONLINE SPACE ■ Interactive ■ Visually welcoming ■ Convenient and accessible	■ Lack of time ■ Realities of women's lives ■ Text communication ■ Lack of others participating ■ Lack of technical skills ■ Technical issues ■ Challenges with email ■ Challenges with Online Gathering Space	■ Means of networking ■ Desire to involve other women ■ Creation of a common vision ■ Organizing for change	■ Connecting supports women's health ■ Health promotion focus ■ Information critical to health ■ Focus for action
Category 1: What Supports Participation in the WNN Category 2: What Women Gain From and Find Worthwhile about the WNN Online Strategy Category 3: Barriers that Prevent Participation in the WNN Category 4: The WNN Supports Political and Social Action Category 5: A Focus on Health and Wellness Motivates Participation in the WNN				

The following is a detailed description of the findings:

Category 1: What Supports Participation in the Women North Network

This category includes intangible things that support women in participating in the

WNN as well as some practical specific supports that women have identified. The themes

and descriptions are as follows:

Valued Feelings

The women described a range of feelings during their experience of participating as

'Spinners' on the Women North Network. Many conveyed a sense of accomplishment as

they learned the intricacies of connecting and communicating through email and through the

WebCT Online Gathering Space. One woman described her experience in this way: *"how*

incredible given my limited skills, (smile)"[4]. Another woman commented that the WebCT

space is *"beautiful and I look forward to exploring it more"*. Motivation to participate was

sustained as Spinners experienced anticipation *"to try something new"*. They were *"excited"*

and *"inspired"* as they *"got to know everyone"*, *"look[ed] forward to 'meeting' more*

women" and *"to logging on and reading other participants' thoughts"*. Appreciating a sense

of control, a woman commented that *"I can participate as much as I like, without pressure to*

do more" and another is grateful that *"I can log on when I like and it doesn't matter if my*

pj's are still on or my hair is not done".

The Spinners said that their lives are enriched through their interactions with other

women in the project:

> *The reason I have enjoyed being a member, is the acceptance and understanding that*
> *women can give and share.*

A sense of trust and closeness gained through participation evolved and relationships began

to develop.

Supportive Relationships

Through their discussions of the broad health and social issues affecting women in

their communities and the kinds of services available to and valued by women, the group

began to learn about each other and their communities. That they valued and respected the

diversity of backgrounds and experiences became apparent through their shared stories. One

woman expressed her growing sense of connection as follows:

> *I liked connecting with other women living in rural communities in the Northern*
> *Region. I especially liked the diversity of age, ethnicity, economic status, sexual*
> *orientation and ability that was in the group and the openness (sic) in expressing the*
> *realities of our differences.*

---

[4] The Spinner's own words will be italicized to ensure that they are clearly distinguishable from the overall discussion.

Another said: *"I loved reading about the other women, what a mix"*. A growing sense of

respect for one another provided a context for building relationships and sharing stories.

Sharing stories and experiences created a foundation for trust, empathy, and

understanding as relationships were built on supporting and interacting and connecting with

one another. Comments that described this were:

> *I really enjoyed hearing what women are doing in other regions in the north and being able to 'talk' to them about what I am doing.*

> *This seems like an interesting and diverse group. Some are so involved in their community, and carry pretty heavy loads. No one complains.*

In seeing that other women shared many of her experiences, one participant stated that she

has *"not been quite so hard on myself for not doing all the extras"*. It seems that the WNN

provides a unique way for women to make personal connections that are conducive for

sharing stories and experiences.

Sense of Community

As relationships began to develop, a sense of community emerged through shared

interests, concerns and northern values. A Spinner expressed this by saying:

> *I am interested in building a northern culture that values local economies, environmentalism, art and music that reflect our uniqueness, women's health and human ecology. I think this network could work to support those values.*

Recognition of common interests, concerns and values within this diverse group of women

was highly regarded and promoted a desire to interact, exchange ideas and to learn from one

another. The following comments illustrate this in the women's words:

> *. . . finding that my issues are others issues as well [and] relating to others experiences*

> *the variety of women that are involved in the project and the wealth of experience that we all bring. Challenging and exciting!*

> *Hearing what is happening for other women in other communities offers a great*
> *feeling of connecting with the larger community*

This sense of community supported women in participating in a number of ways. Participants

said that they felt less isolated as they connected with other women living in similar

circumstances. In one of the women's own words:

> *What I have enjoyed the most is simply "meeting" other women who are facing the*
> *same challenges of living in our remote communities. Simply knowing that I am not*
> *alone out here is a support on its own.*

Another woman expressed this growing sense of community in this way:

> *we are a family, in a way.*

This sense of community was also expressed through appreciation and regard for one

another. Comments included:

> *It is a comfort as well, to know that I am not the only person who struggles with time,*
> *not enough of it! . . . . I am more at ease with the amount of tasks that take up my*
> *daily life.*

> *My heart goes out to the obstacles you face but my admiration goes out to your*
> *strength and courage.*

More Time

The women remarked that if they had more time in their lives they would be able to

participate in the network and to be a part of the growing sense of community in a more

meaningful way:

> *Time, as most of the other women have mentioned, prevents me from being as*
> *involved as I would like.*

This will be explored in more detail as a barrier to participation; however it is also important

to explore time as a support for participation because as one woman put it, *"the biggest*

support would be more TIME of course!" Time allows for more opportunities to learn the

details of the network such as reading and responding to messages, *"I want to find time to*

write about my experiences" and to explore the website and the WebCT Online Gathering

Space.

Coordinator

Participants commented on some things that a support person could do that would be

helpful to them. Some of these comments were in response to direction and assistance

provided by the researcher and research technical assistant; for example:

> *There were times when I was stuck/confused and the timeliness of your responses kept my enthusiasm going!*

> *It was particularly encouraging to have you and [the research assistant] available for consultations as well.*

Other comments described the coordinator as flexible and able to promote a sense of freedom

to participate with no pressure:

> *I do appreciate that I am not feeling pressured about logging on and browsing and posting in my own time and at the times that work for me and my busy life.*

A coordinator/facilitator must be highly available for consultation in multiple ways because

"some personal (messenger, phone) support may be necessary for some to learn".

A coordinator would also act as a moderator for email discussions, chat sessions and

discussion forums in WebCT. She would:

> *[be]someone to question and be sure we are clear and that everyone is ok/or not with what is being said*

> *keep the balance and be sure there is adequate clarification.*

The coordinator would also provide support to participate by providing concise, clear,

explicit directions in how to use tools and features and would remind women to join in by

regularly sending out updates and recaps by email because women *"need a reminder to*

check it [WebCT] out once or twice a day".

The participants suggested that there needs to be someone to lead the coordination

and direction for planning action strategies and events:

> *we would need someone to give us the directions on what kind of document we could*
> *produce with the pictures and text – sort of like a newsletter I guess.*

Although women are interested in being involved in events, they felt unable to take on a

leadership role:

> *I cannot commit to being a main organizer but I would definitely bring the idea to our*
> *local [organizations] if the idea catches. Can either of you suggest anyone that*
> *would like to spearhead this idea and get it out to more people?*

> *I would be happy to help you . . . to come up with a 'one pager' on the message – and*
> *maybe you too . . . as it is your idea and vision. If you get it started . . . I would be*
> *happy to add to it – and have us all input into it – we could all mobilize our various*
> *circles.*

Up-to-date Technology

Women's use of the WNN and internet is supported by access to up to date

'hardware' such as new computers at home and at work, access to high speed internet and

up-to-date 'software' such as internet browsers and word processors:

> *my modem [is] not working at home so having to do my emailing, web surfing at*
> *work on my lunch hours or after work which severely limits the time available for*
> *such activities. I only have dial-up at home anyways as I live outside the cable limits*
> *and can't afford the $550 antennae for wireless (although I am going to start saving*
> *for it after Christmas – along with a whole new computer system).*

Although this will be described and discussed in more detail under barriers, it is important to

include women's recognition of and desire for technological innovations that would support

their participation on the WNN.

Technical Support and Training

Women report that they must have access to training on computer skills in ways that

work for them. They mentioned that face-to-face and one-on-one training would be most

useful. Some women felt that clear *"tutorials and the instruction – were helpful"*. As one

woman said:

> *I liked explicit instructions best – I would print them out and have them beside me at the computer. I would follow them step by step.*

Some women noted that they were able to *"learn and teach myself through simple trial and*

error". Other women commented on the value of having some experience with information

and communication technology:

> *having some experience in this type of space helped.*

> *I love WebCT. I will also note that I have experience using it and also other forms of this type of delivery. I am also very computer literate. I can understand for people who are not experienced and who are not as computer literate why they may be intimidated by the concept.*

Aids to "Navigating"

Although the features of the email list, website and WebCT Online Gathering Space

will be described and discussed in detail under a subsequent category, it is important to note

that the women generally described features of the Women North Network as *"well laid*

out", *"easier to access"*, *"useful . . . for networking"*, and said that they *"love the look of the*

website".

Category 2: What Women Gain From and Find Worthwhile About the WNN Online Strategy

The members of the project identified some tangible information and resources that

were of value to them and some particular features of the Interactive Email List and the

WebCT Online Gathering Space that made them worthwhile. The following themes describe

those resources and features:

Valued Topics

The Spinners raised a number of issues that were of interest to them about women's

health and wellness. Topics included:

- Homecare
- Social Issues
- Poverty
- Breast Cancer
- FASD
- Mental Health
- Breast Cancer
- Education
- Housing Issues

- Parenting In The North
- Birthing & Breastfeeding
- Issues Related To Aging
- Community Connections
- Legal Aid Issues
- Women's Relationships With Women Friends
- Physical/Spiritual Activities For Health

- Books
- Humour
- Having Fun
- Meditation
- Gardening
- Photography
- Cooking
- Crafts/hobbies

Some of these topics were raised and discussed on the interactive email list and

subsequently became Discussion Forum Topics in WebCT. Others were new topics

suggested for WebCT Discussion Forums. Some were mentioned as subjects for future

discussion. Levels of interest varied from a mere suggestion that a topic would be interesting

to explore to the expression of detailed and passionate views on issues such as birthing and

breastfeeding, housing and issues related to aging.

Participants provided feedback on the information available on the website and

WebCT and offered suggestions for new information to be posted. For example:

Can you please make a mental health topic for the discussion area on the webct?

Additions to the resource pages included:

Canadian Center for Policy Alternatives,

SPARC BC

Tips from a Mom www.bbbautism.com/tips_from_a_bc_mom.htm

Valued Resources

Participants found that the shared information about communities and community resources provided them with a sense of what is going on in other regions and with new ideas for resources they could use in their own community. News items; discussion of issues of common concern; descriptions of services for women; and shared strategies to deal with concerns and bridge gaps in services were particularly useful, as this comment illustrates:

It has helped me to identify gaps in service, not just in my community but in the north. The Spinners appreciated that the *"Spinners Gathering Place is a place to talk about the news and what is going on in our own areas of the province"*. It is *"a place to come with problems and find resources, brainstorm ideas for solutions that have worked elsewhere"* and it *"provides a one stop search engine"*.

There are a number of resources provided in the WebCT Online Gathering Space that women said they benefited from. These included the calendar of events, newsletters, an alphabetized list of health topics and social issues:

I find the calendar of events really worthwhile

The calendar is interesting even if I can't attend the events it is good to know that they are going on so that I would be able to get workshop information if I needed it and if any woman I know might be able to attend

There is a wealth of information on the Women North network: community news (i.e. The Well), health topics of concern to all of us at sometime, profiles of women with knowledge to share.

Women are a Source of Information and Resources

Participants found that other participants are a valued resource. One woman expressed her interest in the information that other participants could bring when she said:

> *I am interested in learning from the group about child birth and lactation support in remote communities and where women turn to for help. I think you will bring a unique perspective to this group!!*

Another shared the location of a website that *"also has lots of information to help with the planning process plus information regarding funding options"*. Still another expressed her appreciation for the listing of women's profiles by saying:

> *I stand in awe of all the wonderful women we have right here in the north. I felt for a long time that there is a great deal of untapped expertise in our community and that we should not have to look south for everything we need.*

It was also noted that *"having the resources of a large number of people with a large number of interests gives us all a better chance of getting most information"* and that the WNN *"is, in essence a means of meeting/connecting with other women who are a great source of information"*. One woman summed it up well when she described the WNN as a way to *"give all an opportunity to share their ideas and brainstorm with others to expand and improve their ideas"*.

Email is Uncomplicated

Some of the specific things about the email list that women appreciated were that to some degree it is easier to use because it comes directly to the individual's personal email and the news items are interesting and helpful:

> *I find email simpler. I need more time on the WebCT*

> *[easier] to be able to respond to direct emails as opposed to going to a site and using message boards.*

> *The WNN Email list is good to keep up with all that is going on that is new*

> *email news items . . . are useful and I forward them immediately or delete them depending on if they are relevant"*

> *e-mail – news and press releases were great! It saved my time and energy, I didn't have to look for the information myself!*

> *being on the email list allows us to get information about different items without*
> *having to spend our entire lives searching the net for all the new stuff.*

Embedded links in messages provide a way to view a range of documents, announcements,

newsletters and other resources from websites by merely clicking on the link in the email

message. Some women said they liked:

> *links in the e mails so that I can just click on*

> *when [email messages] have links imbedded in them so more [information] can be*
> *obtained if needed.*

There were also comments that it is uncomplicated to participate in email discussions

because it is effortless to respond by merely hitting a reply option; however, this can also

result in a deluge of messages and confusion about topics.

Some women said that they *"prefer going to the website than getting all the emails*

but need a reminder to check it out once or twice a day" and felt that it would be helpful to

be able to *"sign up for a daily or weekly [email] message that does a sort of recap of what*

has been posted that day (or week) on the web[CT]site".

WebCT Online Space is Interactive

Spinning participants noted that there are a range of features on the WebCT Online

Gathering Space that support interaction. The WebCT email clearly indicates subjects that

are *threaded* (grouped according to subject) separately from other messages and the

discussion forum allows for distinct topics to be created as they emerge. Some of the

women's comments about WebCT are as follows:

> *everything is better organized so that each person can pay attention to the issues that*
> *matter*

> *allows access to the areas of interest and to start new threads when there is an area*
> *not covered*

organized by subject matter and that way I can go in and read on the things I am interested in

all the threads are together and each person can follow along, replying when they feel appropriate.

The live chat tool allows for discussion in real time supporting *"a sense of closeness and immediacy . . . during chat sessions, making it a good way to explore social/health issues".*

Interaction is also supported by providing ways for women to contribute to the content on the WebCT and Website. There are many examples of participants adding new discussion topics, links to websites, local and regional events to the Community Events Calendar, new topics and information for the Women's Health and Wellness Resources A – Z list. There were also suggestions for further developing the space. One woman suggested that a *"community development slant and perspective on the content would diversify it considerably and make it more widely applicable".*

Seven participants provided information about themselves for their profile on the list of members and they enjoyed reading about each others backgrounds, skills and interests:

I have been really interested in the participant profiles. . . . There is just so much we have in common.

The opportunity to take on a designer role provides a way for women to contribute to, to change or recreate the look and content on the existing site. For example, a newly developed Spinners Having Fun page was created by a participant in the designing role in response to a chat discussion about women wanting to share hobbies and other personal interests.

The women also commented that the interactive nature of the WebCT Online Gathering Space promotes discussion and development of action strategies:

I like the way the 'take action' ideas are forming . . . I can see the usefulness if we start getting alot of women checking in to the site.

This will described and discussed in greater detail in a subsequent category.

WebCT is Visually Welcoming

The women described the WNN Website and WebCT Online Gathering Space as visually pleasing and welcoming to women making it worthwhile for them to access. Women's comments included:

> *I love the look of the website and can see that if I worked for a specific women's organization that it might become one of my favorites*

> *I love the web[CT]site and the graphics*

> *I really like the 'Welcome Spinners' page!*

The entry messages, icons and graphics are useful and pleasing and one woman mused that the participants *"could eventually post photos and a map"* that would reflect northern culture, geographic locations and more of context for knowing about each other.

WebCT is Convenient and Accessible

Some participants felt that the WebCT is a worthwhile element of the Women North Network because *"it is web based and accessible from any computer so I can log on at work on a break or at home"*, is a *"convenient way to share with others who want to share and learn"* and because it is *"not always easy to make meetings and at times it is not easy to read. To have a source of newsletters and recorded dialogue available to read as I can is great"*.

Other women felt that *"it is clear and easy to get around"*, *"provides easy access"* and that some features are *"easy to use and quick"*.

> *Category 3: Barriers that Prevent Participation in the WNN.*

The participants in this project have spoken about the intangible things that support them in participating in the Women North Network, about the tangible things they gain from

participating and what makes it worthwhile for them to involve themselves in the network. They also experienced a range of issues and circumstances that limited or prevented their participation. The themes that capture barriers are as follows:

Lack of Time

Lack of time was a major barrier for women who participated in this project. There was a sense of not having enough time to dedicate and focus on activities. Some of the comments included:

> *the biggest barrier has been the lack of dedicated time to go to the site and make it work for me*

> *I was lacking the time to really explore more!*

> *I have found the lack of time to really get into it most frustrating*

> *I didn't have any problems except lack of time*

Some women commented that *"it takes time to really consider the discussions and time is something I do not have a lot of at work OR at home right now"* and that they did not have enough time to really follow along with project activities:

> *I want to find time to write about my experiences – so far haven't been able to fit it in.*

One woman commented that:

> *I haven't taken the time to really get to know the difference between the research part versus the website*

Another expressed her frustration in this way:

> *On hindsight I shouldn't have offered to be a part of the project knowing the time commitment involved and that I would be spending my lunch hours and staying late at work to try and answer the questions and be part of the activities.*

Participants also spoke of other priorities from multiple roles and heavy workload that often take up all available time. One woman said that *"as a working mother of three school age kids and very involved in community volunteerism I feel stretched [in] too many directions"*.

Realities of Women's Lives

The women also spoke of many personal issues and realities in their lives that limited or prevented participation, such as: stress, many roles and responsibilities, health, (dis)ability, energy and other priorities that shifted their focus away from participating. One participant felt that because of *"work, family, extras, sometimes the news releases and info is just one more stressor, some days it seems there is more bad news than good and I just don't want to know sometimes"*. Women's multiple roles, responsibilities and workload impacted on how they were able to participate. Comments included:

> *seeing and feeling my own struggles to stay connected with regular log ins however is telling me something and showing me how incredibly distracted and hard we are on our selves*

> *I did not like that I could not devote as much time as I wanted to this project, seems like every time I sit to read the activities and write the response my children develop urgent dire needs that cannot wait for 10 minutes =:) such is life!!*

> *Workload – work expects miracles sometimes and there is simply not enough time in the day and checking in has felt like work sometimes.*

Some felt that in order to make the Women North Network worthwhile there must be some task oriented activities:

> *We need to start making it happen – so that the energy and time is benefited by concrete action.*

The women also commented that:

> *My whole life is in turmoil right now*

> *health limits the number of hours a day that I can be "functional"*

I felt shy . . . took me a few days of reading the other people's stories before finding the motivation, confidence to introduce myself

Another women felt that *"perhaps the fact that I am really connected locally and regionally and don't have a big need for networking at this time is a factor in my use of this tool".*

Text Communication

Text communication through email and through the WebCT tools easily allows for posting anonymous messages. The option to remain anonymous when sending text messages was offered to participants at the outset of the project. On the Spinning a Northern Web Email List, senders were not identified unless they chose to identify themselves. Spinner usernames were created starting at 99spinner1. Participants had a choice of choosing an alias or using their first name to coincide with their Spinner username. There was a consensus to use first names. The anonymous nature of the interactive email had been confusing. Participants felt that anonymity in text communication was not helpful and was detrimental to building a sense of cohesion. The women commented on the issue of anonymity in this way:

> *I would like each participant to identify where they are from in each message. I need more information to build a context for the stories I am hearing..*

> *I like to see a person as part of how I listen and understand what they are saying.. the stories are great – but the depth doesn't seem to be there for me yet*

Some issues were raised about the limitation of text discussion:

> *I feel this method of communication – emails – is limited. Kind of flat – unidimensional.*

There were concerns about being misunderstood or judged:

> *I struggled with the issue of discussing sensitive topics with women I didn't know. In the absence of body language or other information I questioned whether I would misinterpret their comments or they mine; whether I would inadvertently offend someone*

I know email often lacks a positive emotional flavour ...the negative always filters through

Lack of Others Participating

Women recognize that they may not be participating to any great degree themselves:

I look forward to new posts on the discussion lists, though I am disappointed that there are not more (not that I post frequently myself)

Nevertheless they look forward to and anticipate responses to either their own messages or to

others' messages and are frustrated when there are no responses. One woman said:

I did not like that there weren't new responses in the areas of interest to me in the discussion area.

When there are few women participating, spinner commented that *"the group is not as*

cohesive as we were ".

When the project shifted from the Spinning Interactive Email List to the WebCT

Online Gathering Space, the women commented that there was a noticeable drop in

participation on discussion topics and this decrease negatively affected their sense of

cohesion and their desire to participate themselves:

I am a little disappointed that the online gathering space does not seem to be utilized as much as the email was

I am disappointed that the conversation has died down

Some women were also concerned that all women are not able to participate. Comments

included:

I wonder . . . [if] the WEBCT format is . . . not limiting the involvement of other women in other areas that may also need this type of space or may have something to contribute that we can all learn from?

because this site is on WEBCT, it is not accessible to anyone which means there are alot of women out there that can't access the information on the site.

Lack of Technical Skills

Although technical support through phone and email was available from the research

technical assistant for women during the project, there was very little request for it. However,

participants recognized that a lack of skills did impact their desire and ability to use ICT:

> *its all so new and my knowledge of technology is very limited . . . I need more*
> *computer skills*

> *I am not a 'techie" and get a bit frustrated with the learning process but part of the*
> *reason I wanted to join the project was to push myself to learn more on how to get*
> *around sites.*

Some women seemed to prefer to try to figure things out on their own:

> *I am able learn and teach myself through simple trial and error*

Others had little interest in learning more:

> *I seem to muddle through well enough to participate, but I am not up on the finer*
> *details. I just don't have the interest or motivation to improve my knowledge about*
> *the details. This is not a slight against the project or this web CT, it is my general*
> *opinion of using technology. I tend to learn the bare min[imum].*

Technical Issues

Although careful planning went in to preparing for the Spinning project and there

were many options for women to find and use tutorials and a library of 'How Tos', some of

the women had difficulty managing email and finding their way around WebCT:

> *I have checked and I now have 47 messages since October 18th. (that's when I*
> *became overwhelmed and just left them in my Inbox till I could sort it out) and they*
> *are not repeated or duplicates. Confusing – I am probably missing something really*
> *simple and obvious.*

> *I have logged on to the web[CT]site and all but find it time consuming to learn new*
> *stuff, altho (sic) I know I should just get on with it as I usually like to learn. I also*
> *found I was overwhelmed with all the e-mails and internet connections and tutorials*
> *and I just kind of checked out for awhile.*

Some women described the directions and tutorials as being too technical and hard to find:

I don't do well reading technical directions

Not . . . able to access the tutorial

I am unable to open the tutorial

Outdated computers and hardware also made participation problematic:

> *My barrier was my modem not working at home so having to do my emailing, web surfing at work on my lunch hours or after work which severely limits the time available for such activities.*

Lack of access to high speed internet and concerns about viruses also affected participation:

> *[no] access to high speed internet at home . . . has prevented me from being as involved as I wish I could have been. (In fact, I don't even have dial-up at the moment as my modem isn't working.) Also, my computer is getting old at home and I don't have virus protection on it and so I won't go on the internet anymore anyways because of that threat.*

Challenges with Email

The interactive Spinner Email List generated many messages as women discussed topics raised through activities and as they responded to one another. Although women appreciated the discussions and responses to their comments, there was also a great deal of frustration as women found it difficult to stay current with email messages and activities of the project:

> *All the emails!! Its alot and I want to read them all but don't have a lot of time to give them the attention I would like to.*

Participants felt confused, overwhelmed and pressured:

> *I am over run with [email] . . .I am completely lost.*

> *Too much email and not enough clarity. I am really confused.*

> *I felt pressured to participate at that point.*

Women also lost track of discussion topics using the interactive email list:

I would like to see a way of showing in the subject line what the emails are. Maybe a way of categorizing them so that I can prioritize them when they come in. Sometimes I spend so much time going through them all that I am exhausted by the time I find the one that has something for me to do . . . I am not that clear yet on which ones I need to respond to and which are sent for information and which are simply sharing.

Challenges with Online Gathering Space

The confusion and pressure created when participating on the Interactive Email List

may have dampened some enthusiasm for participating on the WebCT Online Gathering

Space:

I really like the WEBCT site and think if the project would have moved here quicker it may have been better. I was getting really overwhelmed by the emails and thought I may not have time to participate in this project the way things were going. Now it seems like many are not participating on the site and I wonder if they think they will be overwhelmed here too?

Some participants felt that going to a specific place on the internet and then having to log on

was an extra chore and they would need reminders to participate on the WebCT:

I keep forgetting to add the web ct address to my favorites, so have to look for address each time I want to access project.

I need a reminder to check [WebCT] out once or twice a day. I liked the idea of making it my home page but as I was doing my stuff at work I didn't want to do that.

Learning how to use WebCT in a detailed way takes time and some women are confused

about how to use the various tools and participate in the various activities:

I wasn't always sure where to respond and I was lacking the time to really explore more! I am still confused about all the links on the WebCT.

Some women felt that they needed more time to explore in more depth:

am still learning how to navigate the WebCT and website – find it a bit confusing as to what I've read – where – did I answer that question already, etc. but having more time to explore would help straighten it out. I feel pretty confident in my computer skills so it really is just the lack of time and focusing on what I am doing.

Some women also commented that it is a problem for them that there is no way to know if

anyone else is on the Online Gathering Space with them:

> *Did not like . . . the fact that I could not know if someone was also on/at the gathering place . . . it would have been good to know that [she] was 'there' so we could go to a chat if we wanted or to the white board to show something.*

There was an enthusiastic response to the content on the Website and on the WebCT Online

Gathering Space, however, the women made many suggestions for improvement. Some

examples include:

> *I did not like that new discussions were opened rather than answering in one already opened when the topics were the same (or nearly the same). This results in too many threads to open.*

> *calendar is good but I think we should encourage a 'regional' look to this so we can develop that scope of activities the kind that might make me want to travel to participate in . . . a local flavour is nice . . . but for the wider scope of women in the north it is not as useful.*

> *I have looked at the web listings and I am not finding them terribly useful but am thinking I could add a few more that would diversify it a bit*

Although all efforts were made (including a link to the Website on the WebCT homepage) to

distinguish the two sites, there was confusion about the difference between the publicly

accessible WNN Website and the password protected WebCT Online Gathering Space:

> *I am not truly clear if the WebCT Online Gathering Space is what I am on right now? Does this mean the WebCT site that I have been logging onto to check the inbox and new messages in the discussion areas?*

> *I quite frankly cannot tell you what is the difference [Website and WebCT] – I log in and use the WebCT – and I guess that is the only way I have been using the site – there are other ways to enter??? there is a separate web site ???*

Category 4: The WNN Supports Political and Social Action

From discussions about action and about planning an action strategy a description of

how the WNN supports women in planning events and other action strategies is described.

Means of Networking

Spinning participants report that being part of the Women North Network supports networking between individuals, within communities and between communities which, they believe is important for social action:

Networking seems to happen easily via the net. Networking is vital to social activism. One participant said that the Women North Network *"is now the first place I would go to find out what is happening in my community and other areas of the north"* and another shared her view that it *"provides a way of getting information out to other communities"*. It supports sharing ideas, informing one another on issues, brainstorming and finding solutions. One woman suggested that she *"will try and see what kind of regional interest and comments I can get to build on the ideas we are forming"*.

Communicating and networking to find solutions creates bonds between individuals and communities around common issues and builds a sense of connection with a larger community because *"it is an excellent way to connect with others in the province facing similar experiences"*. The network is a means for spreading action in communities by communicating information on issues, solutions found in some communities *"by allowing a place to discuss the issues, share ideas and strategies and plan the next course of action"*.

Desire to Involve Other Women

The WebCT Online Gathering Space promotes in women a desire to involve other women in the WNN. Women found the Online Space visually pleasing and appreciated that they had control over and flexibility in how they participate; they value the resources and information offered and the opportunity to interact with women in many other communities who have similar interests and concerns. Consequently, they expressed a desire to promote

participation in the Women North Network and want to share the same opportunity with

others. A Spinner suggested that a student *"in the social work program at the local college"*

could benefit from participating because the WebCT would be an *"excellent resource for her*

when she is doing papers on related subjects".

Others felt that promoting participation in the WNN would be beneficial to women in

their own communities. One woman said that she knows:

> *many women who would benefit from an online social network and I think having free*
> *local training to help women become familiar with the network would be beneficial. I*
> *also think women could benefit from the safety of the WebCT.*

Other reasons to promote participation included reducing isolation for women locally and

regionally and that as more women participate in the network it would become more

worthwhile as a collective voice of women develops.

Creation of a Common Vision

The Spinning a Northern Web participants indicated that through the Women North

Network a common vision for change can develop:

> *this network has helped me visualize and think a larger regional community of*
> *northern women is possible . . . to bridge gaps and connect over common ground.*

One participant said that it is a way of:

> *establishing common ground building a northern and rural culture that is valued,*
> *respected and honoured by urbanites reducing isolation sharing connections with*
> *wilderness landscapes and inspiring activities in the outdoors balancing northern*
> *solitude with the global village.*

Another said that the network provides a way to identify gaps in local communities by

considering what is happening in other communities:

> *The number of events that stimulate social activism in the north amazes me. When I*
> *see what's happening in other communities I get ideas for events in my community. I*
> *also get inspired.*

A common vision benefits from the diverse perspectives:

> *The variety of opinions and ideas is stimulating and can't help but be productive when it comes to social action strategies . . . having a place to connect is so valuable.*

The vision created by women through their participation engenders a desire to get involved in issues:

> *being in touch with a few women of action and commitment who are attending meetings and events in their community and sharing what they have learned will have a rippling effect in our communities.*

It also provides a way for women to support one another in the face of resistance of others by backing each other up to stand up for common beliefs. As one woman put it:

> *emotional support from others. It is not easy to stand up for what you believe in sometimes and the emotional toll it takes can be devastating, because there will always be people who call you crazy, useless, radical, a bleeding heart.....................................so much more.*

Organizing for Change

The connections, relationships and sense of community that develop through participation on the WNN promote a common and collective voice advancing organizing activities. Women said:

> *Having some back-up to make the VOICE LOUDER and more easily heard.*

> *above all it is good to feel 'connected' to other voices.*

The connections developed through participation on the WNN creates a sense of possibility for organizing common events and action strategies because *"it is a place to come together to 'make news' if there is an issue that requires some action in one place or another"*. It is a way to bring women together to make planning an easier task. One woman said that:

> *many brains make short work! I wish I had this type of help when trying to find solutions to my own organizations funding woes!*

Women said that the WNN also supports women in getting involved both locally and

regionally:

> Having a venue to connect with other women from other northern communities could
> be very helpful if anyone of us was organizing events in our own communities.

It encourages a belief in the power to create change through connecting and organizing:

> It is great to have other women be able to respond to something and realize that you
> can spark some social action that might be heard.

Relationships and community created through online interactions creates a desire to promote

concrete planning for action. As one participant said:

> we need to start making it happen – so that the energy and time is benefited by
> concrete action. Even if it is a commitment to 'talk' about pieces to the idea or some
> idea it doesn't matter what – just that we get some commitment to move forward with
> some thing so we see something come of it.

Participants found that the WNN also supports grassroots movements and began exploring

options for creating an action strategy:

> One of the ideas I have been thinking about is a grassroots campaign to make the
> 'Powers that Be' in Victoria more aware of how their financial decisions and
> cutbacks affect actual people. We are referred to as the 'Heartland' of BC and there
> are some many plays on words that could be used around that theme – 'have a heart',
> 'speaking from our hearts', etc. I am thinking that we could get women of the north
> to make 'hearts' – quilted ones, stained glass ones, crocheted ones, paper cut out
> ones, wall hangings, ornaments, etc and send them to Victoria for Valentines Day – a
> real Heart to Heart campaign.

Category 5: A Focus on Health and Wellness Motivates Participation in the WNN

As mentioned earlier, the women who contributed to the Spinning a Northern Web

project provided a tremendous amount of information about women's health and wellness,

about services and programs for women in northern, rural and remote communities and also

about how health for women and health care delivery can be improved in their communities.

It is not within the scope of the report to provide an in-depth look at what they have said

about specific health related issues. However, it is important to look at how the focus on

health and wellness motivates women to be a part of the WNN because of their passion and

commitment to health for themselves, their families and their communities.

Connecting Supports Women's Health

The women in this project believe that relationships with other women and with

family and community along with connections to community services and programs are a

fundamental determinant of their health:

> *I know a big part of my own wellness is the network of friends I have who care about me – who share my circle of caring with family and children – who I do things with – so when I look around me and see a woman in isolation – with few friends or family close by and little interaction in her life. This becomes an indicator for a quality of life – not there – and a place where wellness is compromised.*

> *connections to community -- this is critical . . . in coping with poor health and offering a power to over come the unwellness – chronic or not – in some way – without the connections within the community beyond family and friends to service providers and programs that link us with people in the community that make us belong to a bigger world than our own vortex of dismay and illness -- this leads us to wellness and makes it more accessible – achievable.*

One woman said that it is *"important for women to be able to access some type of peer*

support" and another hoped that through discussions on the WNN she could *"learn how*

others do self care, how do others keep healthy in a place that has little to nothing in the line

of good health care".

The women described the contribution that connections have for their health and

further suggested how this can be achieved on the WNN. During a chat session one woman

portrayed the WNN as a place to discuss health issues that she may not feel able to take to

health care providers or that she may not want to burden her family with:

> *sometimes a woman can right away understand what you are saying or trying to say also if a person has health questions that are hard to ask the doctor, you could practice here [WebCT] and feel supported that you are not a hysterical female to ask*

these questions also if you live alone, and a lot of us do, you could talk about your worry list, that I don't want to talk about to my kids.

Another woman expressed that she has *"great hopes that this project and website will continue to be a significant addition to the ongoing communication among women in the north"*. Networking through the WNN can be a way for women to connect in ways that may positively contribute to their broad perspective on health and wellness.

Health Promotion Focus

Through their interactions and discussions during the Spinning a Northern Web Project, women were inspired, motivated and animated when talking about their own health, health for women in their communities and their vision of what comprised health:

> *Health and wellness in the north has so many facets, it is more than our bodies; it is our minds, our spirits, and our emotions.*

They eloquently suggested that a focus on determinants of health and health promotion is central to their vision:

> *Health and wellness needs to move beyond looking at the physical needs to be a healthy body; it must look at what is necessary to make a healthy woman.*

> *I think it is important that health and wellness be an interactive and adapting system that will meet the needs of diverse women from diverse backgrounds. We should also not look just to doctors and the medical system for health and wellness. Health and wellness should be addressed broadly and from many avenues. So many women that I have met and work with struggle day to day with poverty, with parenting, with unsafe or inappropriate housing, with inadequate or unsafe childcare, with relationship/family violence, with addictions and so much more. When your entire day is spent trying to make sure your kids have somewhere safe to be and filling to eat, quite often on a pocket full of coins, little time is left for thoughts of your own well-being.*

> *It is interesting times – we are seeing everywhere the talk of 'working together' or 'social determinates of health' but a slow melting of the traditional modes of hunkering down and just getting the work done, dealing with the disease – and not looking up to see what else is happening – I feel very privileged to be a part of this shift in thinking – however slow.*

I believe that the big issue facing women in my community is the lack of resources to keep hope in their lives. Housing is a fundamental issue that many other issues snowball from. Issues such as violence, abuse, drug and alcohol dependency, which are all big problems in my community can be traced back to the lack of basic needs being fulfilled. Without a warm safe and secure place to call home, no one man, woman or child, can be expected to live their lives, work or build a future. Private housing costs are above what provincial income assistance pays and this causes many women to hook up with undesirable men (it works both ways) just to provide the basics in life. When a person is so focussed on just living they can not focus on obtaining skills to improve their life, finding a job to advance their situation or seeing any hope for the future. This affects physical, mental, and emotional health and wellness.

One woman asks the question:

So much of what creates illness is outside of our bodies. Its environmental. How can I create health within my body if all around me is illness?

The women were passionate about the detailed aspects of women's health that were raised.

They were spurred on to engage with one another in these complex discussions even though

their only connection was within the virtual space of the WNN:

And here I am now on this women's health rant that seems to have aroused some interest from the network and I don't personally know anybody out there reading my thoughts.

Information is Critical to Health

Earlier I described the ways in which the WNN supports information sharing

activities and listed a number of topics and issues that women were interested in knowing

more about. It is also important to underscore the women's belief that *"access to information*

is one of the most important things for women to be healthy" and that it is important for them

"to take charge of the information available" because *"knowledge is power"*.

The Spinners' exchange of ideas provides examples of how they see information

sharing and education as a way to have a positive effect on women's health from the most

specific to the broadest perspective:

Knowing what kind of financial assistance and aid is available within other communities would be good information to share.

I think it is most important to provide open, available information on all the different ways a person can deliver a baby, safely, (sic) can nurse or not. This is the age of knowledge and everyone has a right to that.

One of the main goals of the program was to help women overcome 'barriers' by being matched with a mentor who could provide leadership and guidance. Some of the barriers women are facing in school, employment and in the community include poverty, race, disabilities, and more. It is a program I am keen on learning more and maybe participating in and encourage others to check in to it for themselves or for their communities.

Where I am living, there are a lot of Fetal Alcohol Syndrome children and adults I think in order to deal with people who are affected by FAS, people should be educated on what it actually is, what causes it, what we can do to prevent it, etc.

One woman described an online support group that she created on the internet and that was connected through a web link to both the WNN website and Online Gathering Space:

My support group offers support, some information, some links to check out other sites on the web, and just people reaching out to other people for guidance, support, advise, knowledge, whatever you can offer. You do not have to have a child with FAS, just being a parent, or a caring adult, who is willing to offer support to another is good enough. I think FAS affects women mostly because without supports in place, a lot of women are choosing to drink during pregnancy.

Focus for Action

The WNN is a way to strategize and organize for action and the focus on health is an incentive to engage in those activities because women believe that is important *"to make sure we don't loose what we have, and to work at gaining more and better services"* because *"we need to keep and sustain what we have"*. One woman commented as follows:

I think the [WNN] gives women in the north a place and mode to advertise or provoke discussion re: topics that they are working on, have questions about, need to inform others of, etc. All the benefits of the Web CT and e mail that have been discussed pertain to social and health activism being done by this method.

Another woman suggested a strategy for action that considers a range of issues related to

living in northern, rural and remote BC and captures a desire to build on women's strengths:

> *A travelling forum, gathering, whatever you want to call it, something that moves up the Hwy 16 corridor. This will enable women to attend at least one gathering that is close to their homes without breaking the bank with travel costs At each gathering someone could record, pictures, video, etc, events as they take place and at the end hold one big GALA event to share all the experiences along the way or those who cannot attend or connect to internet, some type of book could be made to share the experience with everyone, something with a catchy title that encorporates (sic) all the unique and strong women who live and thrive here.*

Another connected this idea for action to a strategy used by women in the past to address a

specific health issue for women:

> *a travelling road show across the north – remembering the bus that the Vancouver Women's Health Collective took across the province in the seventies disseminating information and resources re: women's reproductive health.*

Other woman contributed to the discussion in this way:

> *This scrapbook would be at every gathering, once the circuit has been completed, the scrapbook could be compiled and published as a story of Rural North Women and our uniqueness and strength, it could then be sold for fundraising purposes. If a scrapbook is too much work, videos could be made, whatever. This would open the door to many who would otherwise be unable to attend a central gathering due to low income, travel restraints, family – well, we all know how many restraints there are.*

> *so empowering to hear dynamic speakers, to see living examples of a life well lived. . . . I feel energized when I am with women my age who are excited about doing things and seem to have no barriers. Role models for the new 'look' of ages 60 and onward. So – after a round about way I say that a conference would be great, like a Woodstock for women's health. We could have speakers and maybe even the Raging Grannies and The Red Hat Society. Count me in! I was thinking of a regional women's wellness event that we could hold this summer.*

Quantitative Analysis – Descriptive Statistics

The quantitative, statistical data used in this description were drawn from researcher tracked email messages and through the WebCT tracking features and entered into an Excel datasheet. The researcher placed all direct email and Spinning a Northern Web Interactive Email messages in separate weekly folders so that the number of messages sent and received could be manually counted. Participant activity on the WNN Online Gathering Space was automatically tracked by a feature in WebCT that recorded the number of times that participants visited or used various tools and features. Messages sent by participants using the WebCT discussion forum were manually counted because the WebCT tracking system provided data about each specific participant and did not include messages that were posted anonymously.

Table 4

Participant Messages Posted Throughout Project

Categories of messages	Phase 1		Phase 2			Phase 3			Total messages
	Week #		Week #			Week #			
	1	2	3	4	5	6	7	8	
Interactive email messages	36	36	13	2	9	0	0	0	96
Direct email messages	35	14	4	8	15	14	5	9	104
WebCT internal email	0	0	17	9	13	1	3	2	45
WebCT discussion forum	0	0	14	16	8	8	24	27	97
Each week Total messages	71	50	48	35	45	23	32	38	342
Each phase Total messages	121		128			93			

Table 4 illustrates the distribution of all the messages posted by participants throughout the 8 weeks of the project. Messages in Phase 1 were comprised of responses to the introductory questionnaire, comments on WNN Email new items and to messages from the researcher outlining activities and focusing attention on health and wellness for women. There were also participant discussion messages as topics emerged and finally there were responses to the Phase 1 evaluation that was sent by direct email to each participant.

Phase 2 messages (see Table 4) were the women's replies to researcher messages that had provided updates, instructions for activities and WNN Email List news items. The Spinners continued to discuss health-related topics through interactive email which also began to shift over to the WebCT Discussion Forum. There were messages requesting assistance from the researcher and some that were in response to the Phase 2 evaluation. The women also used email and the discussion forum to problem-solve amongst themselves. The Spinning Interactive Email List was deactivated at the end of Phase 2; however, the researcher did continue to post reminders and instructions about activities through direct email to participants outside of the WebCT space for the duration of the project.

Phase 3 messages (see Table 4) were primarily posted by Spinners through WebCT email and to the Discussion Forum topics that had resulted from final phase activities. These were focused on sharing action ideas and strategies and responding to and talking about the five research questions (Appendix G). Some participants posted their comments and thoughts on the five research questions and to the final phase evaluation through direct email messages to the researcher.

A result of the complex technical problem described earlier, a copy of the WNN WebCT Online Gathering Space was preserved on October 29. This made it is possible to

view WebCT activity for the first two weeks of the transition phase as participants began

using the WebCT space. The weekend days of October 30 and 31 are missing from some of

the data due to the technical problems; however, the researcher noted in her journal that there

was little or no activity on the WebCT site that weekend. Another copy was preserved on

November 29 that recorded participant use of the Online Gathering Space from November 1

to the project completion.

Table 5

Participant Activity on WebCT

Features Visited	Web CT Participation Oct 18 to Oct 29*	Web CT Participation Nov 1 to Nov 29**	Total Web CT Participation Oct 18 to Nov 29
Discussion Forum Messages read	295	560	855
Homepage	184	222	406
Organizer Pages	41	66	107
Content Pages	11	52	63
Women's Profile List	82	25	107
Quiz/Survey	0	12	12
Calendar	5	13	18
Chat Sessions	0	5	5
Other	29	3	32
Total	647	958	1605
* First 2 weeks of Phase 2 ** Last week of Phase 2 and entire Phase 3			

Table 5 shows that participants visited the features and tools on the WebCT Online

Gathering Space frequently during the final two phases of the project. Ten of the women had

logged on to the WebCT Online Gathering Space within the first two weeks of Phase 2 and

had explored it in some detail and one more had logged on for the first time during the final four weeks.

The Discussion Forum topics and the list of WNN member profiles were popular sites to visit. Although this was to some degree a result of participation in the structured activities, the number of visits does indicate an enthusiasm for those two features and validates what the women said. While the WebCT statistics do not identify the specific organizer pages that each woman visited, it does so for the homepage and content pages. The content pages that the Spinners viewed were those that provided information about the WNN and the Spinning a Northern Web project. Spinners also showed an interest in the Women's Health and Wellness Resources List and the Website Links list. Some also viewed newsletters, announcements and documents relating to funding opportunities and health-related topics.

Phase 2 was extended by one week as was Phase 3. This additional time was intended to accommodate women's busy lives and afforded extra time for women to get caught up on activities, engage in discussions and to explore the WNN WebCT Online Gathering Space in more depth.

By the time that the project was complete, all but one participant had logged on to the WebCT Online Gathering Space. As Figure 1 indicates, there was a wide range of activity on the WebCT Space. The statistical measures show that Participant H had logged on five times when in fact she had not. These log-ins resulted from the researcher's efforts to ensure that there were no technical problems preventing the participant from accessing the site.

Figure 1

Total WebCT Activity: Phase 2 & Phase 3
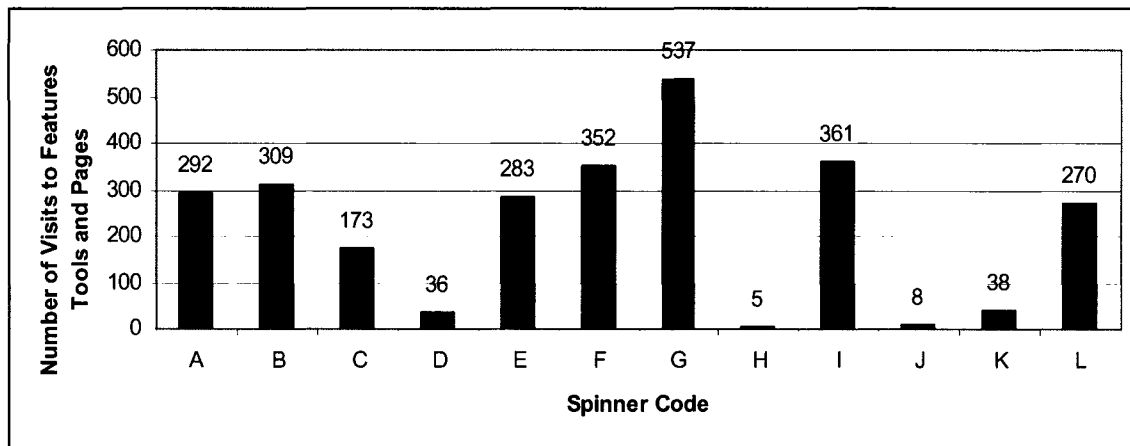
Table 6 illustrates the Spinners participation in the structured activities for each stage

of the project. In Phase 1, all 12 participants responded to the introductory questionnaire;

however, due to one participant's difficulty accessing a computer and the internet,

involvement by the end of Phase 1 dropped to 11 women who engaged consistently in most

activities.

Although the Spinners were encouraged to try out various aspects of the WNN

WebCT Online Gathering Space through project activities, they were not pressured to do so.

The structured activities in the final two phases were intended to engage women in the

process of learning to use the features and tools in WebCT in order to learn a new approach

to interacting and connecting. They were encouraged to continue discussing topics raised

during the first phase; however, during Phase 2 they were asked to shift these discussions

from email to the WebCT Discussion Forum. Participation in activities during Phase 2

dropped somewhat. Also, during this time another participant withdrew from the project.

Table 6 also indicates that nine was the highest number of participants engaged in any of the

suggested activities. However, participation was actually distributed amongst 10 Spinners

across the range of possible activities. All 10 did not complete all of the activities. One

participant chose to take on the role of designer. Although the women expressed interest in

and were intrigued by the idea of taking on a designer role, no others felt they had the time to

devote to learning the skills required to add content to the Online Gathering Space. The

evaluation for Phase 2 was available to participants in a number of ways. Three women took

the opportunity to learn how to use the quiz tool and submitted their evaluation in that way.

The other five did so through email.

Table 6

Participation in Structured Activities

Phases	Activities	Number of participants
One	Introductory questionnaire	12
	Participants introduction message	11
	Health for women discussion	11
	Suggestion of health topic	11
	Women's services discussion	8
	Phase 1 Evaluation	11
Two	Email message in WebCT	8
	Post discussion forum message	9
	Information for women's profile list	7
	Post event to community calendar	3
	Addition to website list or resource list	8
	Designing role	1
	Phase 2 Evaluation	8
Three	Taking action discussion	8
	Live chat	5
	Research question discussion	8
	Phase 3 Evaluation	5

Table 6 also indicates that eight participants were engaged in most activities and discussions during the final phase. Some were unable to join in on live chat sessions as these were scheduled for times when the greatest number of women was available. There was enthusiasm for the Taking Action activity. Eight participants posted 18 messages on the discussion forum and there were three chat sessions to discuss the topic. The Research Question activity was available through the WebCT Discussion Forum and six participants used that option to post their thoughts and to respond to other's comments. Two others provided their comments through email. The Phase 3 evaluation was made available using the survey tool in WebCT and through email. Three women learned to use the survey tool and responded in that way. Two others responded through direct email to the researcher.

The statistical description of the participants' involvement during the project – the number of messages they sent, the number of visits to the various features on WebCT and their participation in the structured activities, validates the Spinners' own descriptions of their experience of using email and the WNN Online Gathering Space. For example, there were indeed many email messages exchanged during Phase 1 which led to some women feeling confused and intimidated. Contributions to the various topics for discussion dropped off when they were relocated to the Discussion Forum on WebCT. However, there was a great deal of activity on the other features offered through the Online Space. Although it is not possible to run sophisticated tests on this data due to the small sample size, this statistical description provides an illustration of the women's participation and confirms their experience as described in the qualitative analysis.

Chapter Eight

Discussion

This chapter is intended to provide an interpretation of the categories, themes and statistical information described previously. It is important to emphasize that I in no way believe that I am the expert on or have any special insight into the Spinners' experiences. I do however, hope to adequately and accurately express an understanding of their experience by paying close attention to the essence and spirit of what they have shared with one another and with me through this project. This is one interpretation; however commitment to this interpretation in no way precludes the possibility of other interpretations (DeVault, 1999).

Interpretations of the significance of the findings are based on my intimate association with the project, the analysis of the data and the description of the results as I have come to understand them (Patton, 2002). This account is founded upon the frameworks for understanding a women-centred approach to health and ICT as discussed previously through the review of relevant literature (Grbich, 1999). I also draw from my strengths-based social work practice framework which has a foundation in progressive, structural, anti-oppressive social work values and principles. It is my intention to reflect on and to convey in a respectful, thoughtful and women-centred way, my understanding of what the women in the Spinning a Northern Web project have said is practical, meaningful and supportive for women using ICT to network for health and wellness.

The findings from this research provide the basis for an understanding of women's experience of using ICT; in this case, participating in using email, the WebCT Online Gathering Space and the WNN Website. This discussion is rooted in the Spinners' own understanding of and perspectives on what supports and prevents their participation, what

they gain from and find worthwhile about participating, what supports them in taking action

to influence health and social policy and how a focus on health motivates them to participate.

I will consider and explore these as implications for creating a women-centred approach to

ICT that will have significance for the Women North Network and other similar networks.

The categories of themes that emerged through this research are to some degree an

artificial construction of the women's experience. They are:

1. What Supports Participation in the WNN
2. What Women Gain From and Find Worthwhile about the WNN Online Strategy
3. Barriers that Prevent Participation in the WNN
4. How the WNN Supports Political and Social Action
5. A Focus on Health and Wellness Motivates Participation in the WNN

The themes and their features were at times quite specific and distinct (e.g., the tangible,

specific gains such as information about health and social issues or features that make email

or the online space worthwhile). Conversely, themes were at other times interwoven and

interrelated (e.g., the issue of time and its impact on when and how women participate thus

influencing their perception of what supports them, what they gain, what they find

worthwhile and how they take action). The possible variations, combinations and

transformations illustrating thematic uniqueness and interrelatedness are too many to reflect

on in their entirety; however, the broadest most significant of these will be discussed.

Women recognize the value of the Women North Network and the opportunities it

provides for using ICT to share information and resources about health and wellness. They

also recognize its worth in furthering their strategies to influence health and social policy,

programs and services. Furthermore, they are enthusiastic about the possibilities it offers to

come together in a virtual way to learn about other communities, to share experiences and

expertise, to explore, discuss and gain support for their personal and political concerns and

take action on common issues. There are explicit and implicit ways that they identify both practical and abstract concerns and complexities about access to and participation in the electronic strategy of the WNN. Finally, they appreciate the WNN as an online venue to build relationships resulting in a sense of community that provides a structure for women to explore and take action to promote health for themselves, their families and their communities.

The women in the Spinning a Northern Web project challenge networks such as the WNN to create electronic strategies that contribute to and are amenable with their daily lived experiences. The women-centred, expansive view of health as the foundation for the WNN contributes positively to women's lives and supports them in exploring the social determinants of health and a vision of health and health promotion for northern, rural and remote communities in BC. Furthermore, it is a catalyst for creating an electronic space that is centred on women, offering them an opportunity to influence the internet to become a tool that meets their needs.

Access Leading to Participation

Through their own words and through the multiple ways in which they used email and the WebCT features and tools, it is clear that women in this study acknowledge the value of ICT strategies such as the WNN as an electronic way to support women's networking activities. In order to transform acknowledgment into practical, concrete worth, ICT and networks such as the WNN must be accessible in meaningful, practical and significant ways so that the opportunity to participate conforms to the realities of women's lived experience (Pollock & Sutton, 2003).

The findings in this study support the proposition that an important aspect of access to and participation in ICT is the availability of up-to-date computers and software, to affordable high-speed internet and to skills training (Baker, 2003; Huyer & Carr, 2002). Women reported difficulty in participating due to a variety of technical barriers related to computers, internet and skills; one study participant withdrew because of complications related to these kinds of difficulties. This issue is of particular importance to women in northern, rural and remote communities where publicly accessible computer stations and availability of high speed internet access is problematic due to geographic isolation and prohibitive cost (Baker, 2003). Currently, information, resources and services are more and more often channelled to communities and individuals through the internet; requiring the use of computers (Sy, 2003). Communities, groups and individuals that do not have the resources, capacity or opportunity to readily access computers and the internet are less able to participate in and contribute to the governing and redistribution processes that are significant for them (Hackett & David, 2003; Stayaert, 2002). They are also left out of decision making processes about how information and communication technology will be further developed and used.

Other access issues identified by the Spinners are related to women's unequal access described elsewhere as the digital divide (Baker, 2003; Eckdahl & Trojer, 2002; Huyer, 1999; Light, 2001). They provided an account of the difficulties that influenced their capacity to access and participate in using the WNN. These included heavy workloads due to their multiple roles in the community, workplace and family; a lack of the financial means to purchase computers and high-speed internet; and a lack of skills training. Most participants confirmed an interest in learning more about ICT and many stated they wanted to be part of

the project in order to learn more and to gain more skills in using computers and the internet. However, they also emphasized a sense of discouragement, lack of motivation and insufficient time to focus on learning anything more than the minimum essentials required to use ICT in their jobs and to fulfill their basic communication and information gathering needs.

These digital divide complexities are often related to unequal access for women due to gender issues such as fewer opportunities to benefit from the supports required for effective use of ICT (Huyer & Carr, 2002). Socio-economic inequities that result in barriers such as poverty and lack of employment and education are often associated with women's inequality and oppression and further complicate the digital divide (Baker, 2003; Bimber, 2000; Hackett & David, 2003). Barriers to women's use of ICT in general, and in the WNN in particular, replicate those that complicate women's full access to and participation in the benefits of society which contribute to and promote their health and well-being (Eckdahl & Trojer, 2002; Escobar, 1999).

The description of the findings also indicates that, despite these barriers, the WNN is an example of women creating and recreating the internet to become more practical and useful to them. It provides valuable information and resources and augments their networking, relationship and community building activities. It is a way to build on local efforts to organize for action to create positive change. Furthermore, the WNN offers women the opportunity to expand their local action strategies to a larger northern and regional level; thus creating a stronger voice for change. Finally, it is indeed useful in furthering their goals to promote health for women by providing a means to advocate for and work towards equality and social justice.

Access and participation are both the challenge and the solution. The challenge is to ensure that women have equitable opportunity to use, benefit from and influence ICT. The solution involves women gaining those opportunities. As they do, their contributions and influence ensure that ICT will develop in women-centred ways that promote inclusion, respect for diversity, and a focus on social justice. This study highlights some of the elements that support women's access to and participation in the WNN and ICT in general.

The process of the Spinners connecting with one another, developing relationships and building a sense of community, contributed to a foundation for them to begin discussing and organizing events to benefit their health and wellness (e.g., a 'traveling gathering' women's health fair) and for action to create social and political change (e.g., the 'Hearts from the Heartland' campaign). The process of finding and building from networks of supportive, quality relationships has a positive influence on women's health (Leipert, 1999) and engages them in being a part of utilizing and developing ICT to their benefit (Balka, 1997; Light, 1995).

Relationship and Community Building Leading to Action

In this study, women have described both through their words and through the manner of their participation, the concrete and the intangible things that engage them in using the internet and the WNN. Their interest in learning more about one another is evident in the number of times they visited the profiles of women in the Online Gathering Space. It is further evident through the supportive relationships that began to develop out of their admiration and respect for one another as they shared stories, experiences and perspectives. They learned that they shared similar concerns for women's health and wellness, had comparable difficulties with managing multiple roles and responsibilities and held common

views on the value of ICT and issues with and barriers to using computers and the internet. A growing sense of community developed that was further supported by a high regard for the diverse nature of the group and a commitment to the unique values that some described as a northern culture. These supportive relationships cannot be underestimated as a foundation for building women's capacity to use ICT for their own benefit and to create an online community that takes action to create positive change (Pollock & Sutton, 2003; Sutton & Pollock, 2000).

Online community grows when women recognize that concerns in their local communities are comparable to those for women and communities across the North. There is much that they can learn from one another about confronting these common difficulties. A sense of community is further supported as women refer to and express a desire to preserve a common vision of the North and northern values and culture. They share concerns about who is left out of this online community and seek to find ways of extending the opportunity to other women. They value diversity and recognize that women from many backgrounds, cultures and experiences bring an esteemed perspective and unique knowledge and skills to this community.

By connecting on common interests, issues and values and through promoting inclusion of others, the stage is set for them to begin to consider ways to create a collective voice for addressing their mutual concerns. It is an opportunity to also create a voice for the preservation and advancement of the values that are the foundation for a unique culture of living in northern, rural and remote communities in British Columbia. They feel empowered by the capacity of women in separate geographic communities, distant from one another, to join together through networks such as WNN to create a louder, stronger voice that comes

from many women expressing their desire for change. Women are also motivated to influence the policies that have such a profound impact on their lives – policies of governments that are far removed from them geographically and from the values and ideals they wish to preserve.

Contributing to Women's Lived Experience in a Positive Way

Undoubtedly, the factors that support and limit access to and participation in building online community and creating action strategies are complex and often indicative of issues that occupy, sustain and burden women in other aspects of their lives. The women in this study have many demanding roles and responsibilities. They value their relationships, community connections and the precious little time that they seek to shelter for their own self-care. They have strong connections to and concerns for family and for their local communities. Their many roles and responsibilities are complicated by issues such as geographic, social and cultural isolation, socio-economic status and health and disability issues.

The level to which women participate in electronic strategies such as the WNN is made more difficult when women are required to prioritize the array of responsibilities and choices that compete for their attention and time. To find value in participating in a virtual network such as the WNN, there must be outcomes that enhance their lives and alleviate rather than add to their heavy workloads and responsibilities. Uncomplicated access to current and relevant information that can be used in fulfilling responsibilities and completing tasks would provide that appeal. Support for personal issues and concerns as well as promotion of meaningful dialogue on health and wellness topics and social issues in a timely and interactive manner is also engaging. Furthermore, ICT and the WNN will become an

integral part of women's networking activities when women can trust that their ideas and strategies will result in concrete action with positive, tangible achievements.

Women sometimes feel burdened by their lived experience and by a sense of being pulled in many directions. Project participation made it clear that involvement in electronic strategies such as the WNN must not add to that sense of being burdened. Women value opportunities to explore and share activities for self-care and fun. As a place to offload some of the stress they experience, ICT and the WNN facilitate greater participation and health. Moreover, it offers information and resources about health as well as supports women as they strive for health and wellness, rather than contributing to factors that drain women's energy leading to ill-health.

Women's involvement in the future development of the network will ensure that it contributes positively to their lives rather than competing for valued attention and time. It is through promoting greater and more accessible participation that the network will continue to develop in ways that are meaningful and valuable for women; consequently making it worthwhile to be involved in ICT and contribute to its further development.

Significance to and Implications for Social Work Policy and Practice

Information and communication technology provides a structure for social work advocacy and social and political action using powerful tools for gathering and sharing information and resources, raising awareness of issues, and applying pressure for social change (Harcourt, 2002; Hawthorne, 2001). Perhaps most importantly, it has the capacity to encourage inclusion and participation in activities that promote an equitable society, political action and social change (Hick & McNutt, 2002; Lai, 2002). The social work profession is in a position to adopt ICT, and particularly the internet, to bring innovation to social change

objectives. The lessons learned from the women in this study can inform and guide social

workers as they create online social work practice.

As part of the development of social work practice and social policy that embraces

information and communication technology, it is critically important for social workers to

recognize and confront the digital divide. Conventional issues that are often barriers to full

participation and equitable access such as poverty and lack of access to economic and

educational resources can also prevent full participation in and equitable access to using and

shaping technology (Escobar, 1999; Steyaert, 2002). While participating in the development

of online tools that are responsive to social justice concerns, social workers must also work to

ensure that such tools are accessible to all.

A way for the social work profession to address these concerns is to focus on health

promotion and to confront the complexities of those things that determine health for

individuals, families and communities. The women in this study have demonstrated their

concern for issues related to poverty, violence, education, employment, housing and so on.

They have specifically articulated the troubling nature of these issues within the context of

health for women, their families and communities in northern, rural and remote regions of

BC. They have much to contribute to understanding and responding to difficulties related to

the social determinants of health. Furthermore, they have much to offer in the development

of innovative health promotion and social change activities. Effective, practical and fitting

social work practice that meets the unique needs of northern, rural and remote communities

can be informed and guided by drawing on the grassroots expertise and experience revealed

through electronic strategies such as the WNN. It can offer ideas for concrete, substantive

processes and tools to promote social change through health promotion and to utilize the power of ICT to build community engaged in action for social change.

Future Directions: Women Leading the Way to Equitable ICT

The following recommendations provide some suggestions for the future development of ICT that will make it more effective and useful for women in northern, rural and remote communities. Also included are recommendations for the expansion of women's networks using ICT and the internet and specific recommendations for the Women North Network.

Recommendations for ICT Policy and Practice

Unequal and problematic access to and participation in ICT is related to other larger structural inequities in society. In order for ICT to contribute positively to women's lives, there must be a commitment from governing bodies to develop and implement policy to ensure equitable access to and participation in ICT. Social work and other health promotion professions confront the unequal access to and participation in resources and benefits offered in society. It is imperative that ICT becomes a central and integral part of those efforts. The following recommendations address issues related to these concerns.

1. Policy makers should recognize that the lack of access to and participation in ICT impacts on all citizens and specifically women in northern, rural and remote communities. A lens should be developed and used to scrutinize existing and future policy and implementation of policy to ensure that they provide for equitable and significant ICT access and participation.

2. Policy makers should also recognize that information and resources critical to women's equal participation in society's benefits are increasingly channelled through ICT.

Information about and access to social and health programs and services are more and more often provided through the internet. Women will benefit from policies, programs and services that ensure that they have access to these important benefits. This will be achieved by local, regional and provincial governance bodies putting the infrastructure in place that secures straightforward access to ICT and the means to gain the skills and expertise to use them effectively.

3. Social workers should recognize that ICT provides a dynamic means to empower and organize individuals and groups. By adopting the use of ICT in their advocacy efforts, social work advocates and activists will increase their capacity to work with larger numbers of people over larger regional areas on issues of common concern. This practice will begin shaping ICT as a tool for social development and social justice.

4. Social change efforts that include a focus towards advocacy for equitable access to the benefits of ICT, and full participation of all citizens in the future direction of ICT, will strengthen larger social change goals. Challenging and breaking down the barriers to full participation in ICT provide new ways of tackling those barriers and inequalities that result in many of society's injustices and ills.

Recommendations for Expansion of Women's ICT Networking Strategies

The following recommendations are suggestions for existing or newly developing women's networks that are considering using ICT to augment communication, information sharing and strategic organizing.

1. Women from diverse backgrounds, who have experienced oppression and unequal access to the benefits of society, should have a lead role in ensuring that electronic strategies and the internet evolve; encompassing features that are welcoming and appropriate for them.

This will require that women from a wide range of backgrounds have the opportunity to gain technical capacity, skills, knowledge and expertise in ways that are practical and functional in meeting their unique requirements. Furthermore, expansion of electronic strategies should be targeted towards seeking out women from diverse backgrounds as partners and joining with organizations and other networks that are already working to build online communities of women.

2. Electronic strategies such as online networks addressing health and social issues must include features of the culture and values that are consistent with the communities of women that exist in real space. This can be achieved by including larger more diverse groups of women, making it possible for them to connect with others who share their interests and concerns. When women find supportive relationships that engage them in duplicating and building on the communities that they value locally, they will build online communities and take action to effect change on a larger scale.

3. Concrete action engages women and provides them with a sense that taking time and attending to activities contributes to their lives in a positive way. Linking online community building efforts to local and regional community concerns and interests for women is critical. Action strategies using electronic means to connect communities of women must build along side of local interests and concerns as well as build from local capacity. ICT provides powerful ways for women to connect and discuss approaches to deal with issues of local and regional concern. That power should be utilized in flexible and creative ways to meet the specific and unique concerns for local communities. Approaches to action that are achievable in local communities will serve to include rather than alienate women in the process.

4. Access to up-to-date computers and high-speed internet may be problematic for women living in geographically and culturally isolated communities. Network expansion activities should be underscored with a focus on working with these communities of women to hold local, regional and provincial governance bodies accountable to provide these necessities and to secure funding to remedy technological infrastructure issues.

5. Technology can increase the burden women experience if it means taking time and energy to learn how to use it effectively. Local, women-centred, face-to-face and online skills training that is available when and where women prefer is essential. This can be accomplished by implementing educational and training programs that are ongoing and adaptable to women's existing capacity. In particular, programs should offer low or no cost drop-in sessions with child care services and accommodation of such things as cultural, language and disability issues. Technical information must be meaningful and use every day language.

Recommendations for Future Development of the Women North Network

Reliable, women-centred, up-to-date information and resources that are relevant and specific to issues of concern for women in northern, rural and remote communities are available on The WNN WebCT Online Gathering Space and WNN Website and through the WNN Email News List. As women become aware of and come to appreciate the value of the network, it will develop into *the* place where women will gather in virtual space in northern BC. In order to achieve this, women from many communities and from a diverse range of backgrounds that are concerned with an array of issues, need to be involved in and committed to the further development of the WNN. As women join the network to gain valued information and connections, they will begin building relationships leading to a strong

community aimed a bringing positive political and social change to northern BC

communities. The following is a specific list of things that could be considered to move this

network forward:

1. Strategies to expand the network should incorporate an emphasis on advocating for

    greater opportunities for women to gain more skills and expertise in using and

    influencing information and communication technology. An integral thread must be

    incorporated throughout all WNN activities that advocates for greater access for women.

    This fundamental goal of the network will create positive change for women whose

    socio-economic status and lack of educational opportunities prevents their participation.

    Furthermore, it will promote inclusion of women in communities that do not have access

    to computers and internet and those who experience cultural and language barriers to

    ICT.

2. A woman funded specifically to coordinate the future development of the WNN is vital.

    A paid coordinator would not only have the skills but also the time to implement and

    further develop the recommendations made through this study. As a facilitator, she would

    work with others to create a process for including a diverse representation of women in

    the network. In a leadership role, she would coordinate action strategies that are flexible

    and responsive to the expertise and capacity in local communities. Moreover, she would

    facilitate and moderate discussions, provide one-on-one support for WNN members and

    locate, train and support local designing women from a variety of communities and with

    a diverse range of backgrounds.

3. A diverse group of designing women, to create, recreate and maintain the website and

    WebCT space will be integral to the further development of this network. They would be

committed to maintaining up-to-date information and resources that enrich women's lives. They would work with women both locally and regionally to become part of the network. It would be ideal to have designing women in each community across the North.

4. The factors that sustain women in their everyday life, such as meaningful relationships, connection to community, concrete action to achieve positive change, fun and self-care must be duplicated through participation in the network. The spaces cannot remain static; they need to grow with a concern for and sensitivity to women's evolving needs as a central focus. This will be accomplished as women participate more fully in developing the network.

5. Complex websites, large attachments and even the WebCT may be an obstacle for women using outdated computers and slow internet connections. The WNN should provide options for participation that are straightforward, clear, require minimum skills, and have no 'bells and whistles'. This will ensure that women with basic skills, older computers, dial-up internet (slow telephone-line) connections and minimal access will have the opportunity to contribute and take part.

6. A range of options or levels at which women may choose to participate, that corresponds with their purpose for being involved in the WNN, should be considered. Some may wish only to receive news items through email; others may want to participate as a group interacting only with one another (e.g., research or support group activities). Still others may want to interact with other women for personal, social or work-related support and use the space as a means to have fun and find information and resources related to their self care activities. It is essential that the online components of the WNN emulate the ways that women currently use ICT daily. This may mean exploring the inclusion of

other ways to use ICT for networking such as: *web logs*[5], *instant messaging*[6] and publicly

accessible online support groups.

Limitations in the Spinning a Northern Web Study

This study involved a small sample of women engaged in using ICT and the WNN

for a short period of time. The results should be considered preliminary and caution used

when making assumptions about generalizing to a larger population of women or to specific

groups of women.

Within the scope of this study, it was not possible to explore in detail the distinctive

issues of concern that are unique to specific groups of women (e.g., First Nations women,

women living in poverty, women with disabilities, older women, younger women, lesbians,

refugee/immigrant women, and women as sole parent). Furthermore, this project did not seek

to explore cultural or language barriers that complicate access to ICT. Finally, this study did

not include women with limited access to technology or lack of basic computer and internet

skills. Therefore, it does not reflect access and participation issues for women who are

unfamiliar with ICT or who have little or no access to computers and the internet. In order to

arrive at a full understanding of how ICT and the Women North Network can become truly

inclusive and advantageous for all women in northern, rural and remote communities, these

issues must be explored.

The procedure for this study was complex and confusing for some of the study

participants. Some women suggested that beginning immediately on the WNN WebCT

Online Gathering Space would have been helpful to them. Many found that the number of

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[5] Also known as weblogs or blogs and is similar to a website, however, allows many users to add postings and is publicly accessible.

[6] An internet-based real time service that allows text communication between individuals and offers an option that alerts the user when people on their contact list are online and available to chat.

email messages at the beginning of the project was intimidating. The complexities that developed from numerous activities, instructions and tutorials also made it difficult for women who had gotten behind on things to catch up. Women felt pressured to contribute and to participate.

Implications for Online Research

It is critical that research conducted using information and communication technology include a component that looks at and comments on the process and implications for future online research (Mann & Stewart, 2000). Using the internet as a research tool has the potential to promote the participation of people who in the past may be left out due to geographic location or other barriers related to their environment. Some may have been missed due to their marginalized position in society. Others may prefer to participate without having to interact face-to-face. Although online research does present difficulties related to disparities in skills and knowledge, equipment, software, internet speed, technical support, time resources and beliefs about the value of ICT, its potential cannot be dismissed. Some specific issues related to online research are briefly discussed below:

1. Online research produces copious amounts of textual data with no need to plan for transcription; however, organization of the data requires meticulous downloading and saving to password protected files to ensure that all the textual information is considered, included and kept confidential.

2. Online research using procedures and methods that involve individuals participating daily on an ongoing basis and over an extended period of time, requires a great deal of effort and time on the part of the researcher. The researcher should be prepared to be online frequently and consistently in order to be available to participants. This will require a full

time focus during the data collection process. A reliable computer and access to dependable high-speed internet are essential.

3. In order to mitigate technical problems that may occur whenever using technology, computers, and the internet, administrative technical support people through universities or other organizations should be willing to learn about online research. A specific person working with the researcher must have intimate knowledge and understanding of the intent and procedure of individual studies. It is critical that their solutions to technical problems are meaningful and do not have a negative impact on the research process.

4. When conducting online research, it will be important to have a clear, detailed plan about the level of skill and the access required for research participants to be effectively involved in the project. A checklist of specific skills, attitudes toward using email and the internet, current usage practices and availability of reliable computers and internet access should be explored in detail through the recruitment process. A pilot test of the project involving individuals with a range of skills, computer and internet access, and from a variety of backgrounds may provide valued insights into issues that could be explored through the recruitment process. This must be done within the framework of remaining conscious of who is excluded from the research when the criteria for participation are determined.

5. Research can be conducted effectively using email for short term focus group discussion. It is however, imperative that participants are prepared for multiple messages and perhaps even have detailed instructions on how to manage email messages. This could include directions for using subject lines effectively and organizing messages in folders on email according to date, topic or sender.

Recommendations for Future Research

Implications for future research have been alluded to throughout my discussion of the limitations of this study and the recommendations that come out of it. Any future research will benefit from a detailed and comprehensive exploration of the literature related to the "diffusion of innovations" (Rogers, 2003, p. 11) that explores how some innovations are successful in becoming an integral part of society. The following is a list of specific recommendations and a brief explanation of each:

1. Future studies involving First Nations women, women with disabilities, immigrant and refugee women, and other groups of women who have historically been marginalized from society will reveal the specific and unique ICT related issues for women in a more focused way. Language and other cultural barriers should be explored. Recommendations and strategies for the future development of ICT, the internet and networks such as WNN that are responsive to these issues are critical for the further inclusion of women. The potential to engage in a process for making ICT and the internet more meaningful, useful and responsive to the larger social and political goals of a broad range of women will be achieved only through involving diverse perspectives.

2. Including a focus on how women can become a greater influence in the further development of ICT must be a fundamental component for any future research related to women and ICT. Utilizing women's passion for and commitment to social justice, health promotion, and social and political action towards change can assist in engaging a broad range of women in this process. Areas that might be explored include women-centred training for girls and young women on internet and other ICT and considerable exposure to technology within the school curriculum. This kind of research should be done with

the goal of discovering how the internet and other technology can become useful and meaningful within women's lived experience.

3. Community-based, participatory action research approaches will be critical to future research as women explore issues related to their use of and involvement in the development of ICT. The Women North Network has created a foundation for communicating and partnering with women from rural and remote communities across northern BC. This network can be a catalyst for bringing together community-based researchers and academic researchers who are interested in community driven goals for research focused on creating change. Collaboration to create strategies that address issues of access to and participation in ICT and that influence the internet to reflect a diverse range of women-centred values would become possible. The WNN provides an ICT framework to begin the exploration of and implementation of valued ways of building online communities that will influence how the internet and ICT can benefit women in a meaningful, practical women-centred way.

Conclusion

Undertaken entirely in virtual space, this innovative project examined the potential of information and communication technology as a means for women to organize themselves to address health and wellness concerns in northern, rural and remote communities. The direct voice of participants provides an understanding of what was practical, meaningful and supportive for these women while using the Women North Network online strategies.

Their detailed account identified critical issues including the importance of access to ICT infrastructure, training and skills as well as opportunities to replicate, in a virtual way, the supportive relationships and connections that they value in their local, physical

communities. A sense of being a part of an online community supports women in reaching out and connecting over a vast geographic area to take political and social action on the issues that they collectively believe will benefit them and their communities. Their passion and commitment for promoting health in its broadest context motivates them to engage with one another through this innovative network.

Of particular significance are the implications for social workers and others who are integrating information and communication technology as part of their daily practice. This study suggests that advocating for women's greater access to and participation in ICT is a critical component of organizing toward social and health policies that meet the needs of northern, rural and remote women and their families. Moving into a future where social justice and equality continue to be illusive, social workers who are skilled in the use of information and communication technology can ensure that ICT becomes a force for creating a more just and compassionate society.

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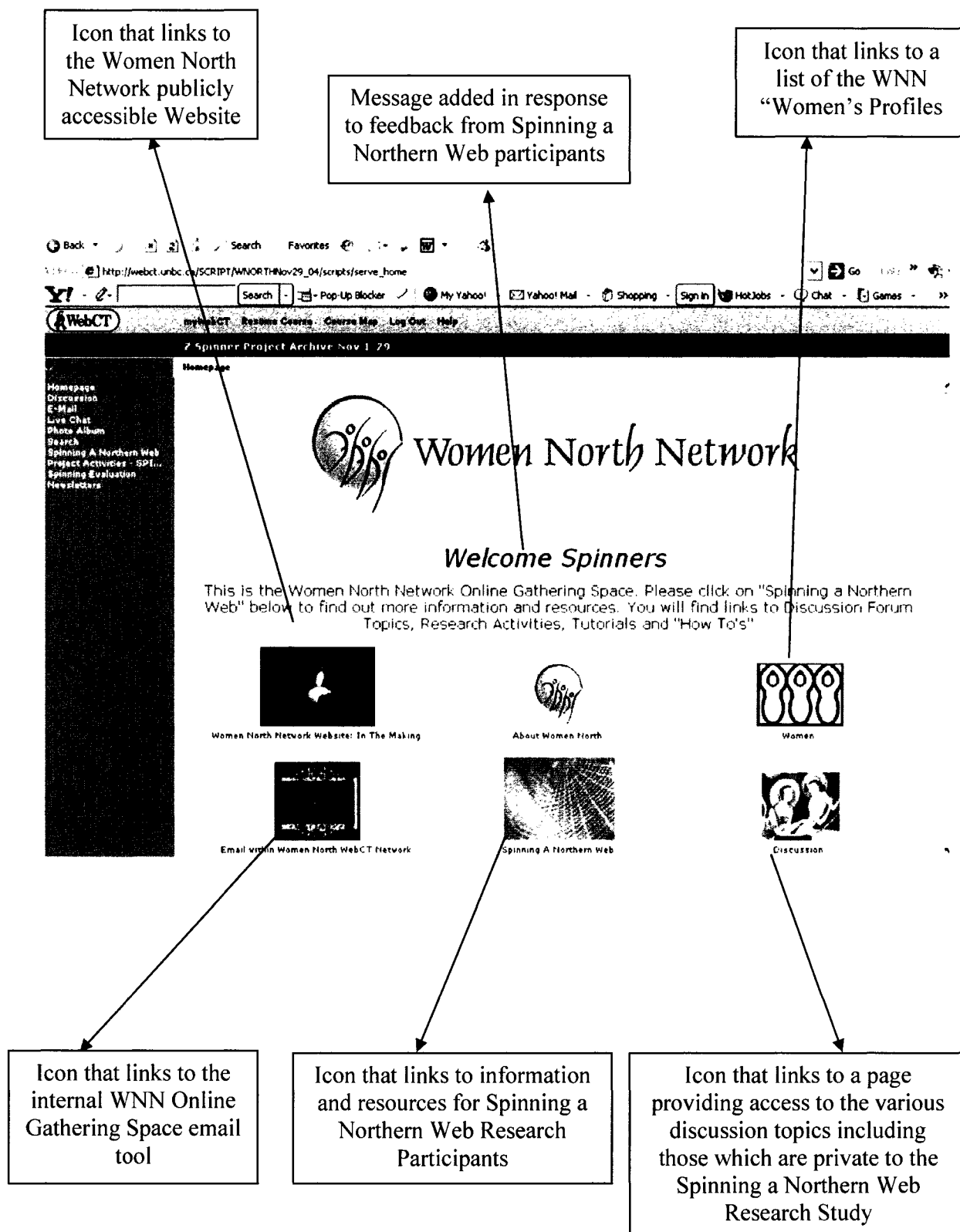
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Appendix A

The WNN WebCT Online Gathering Space

Icon that links to
the Women North
Network publicly
accessible Website

Message added in response
to feedback from Spinning a
Northern Web participants

Icon that links to a
list of the WNN
"Women's Profiles

Welcome Spinners

This is the Women North Network Online Gathering Space. Please click on "Spinning a Northern Web" below to find out more information and resources. You will find links to Discussion Forum Topics, Research Activities, Tutorials and "How To's"

Women North Network Website: In The Making

About Women North

Women

Email within Women North WebCT Network

Spinning A Northern Web

Discussion

Icon that links to the
internal WNN Online
Gathering Space email
tool

Icon that links to information
and resources for Spinning a
Northern Web Research
Participants

Icon that links to a page
providing access to the various
discussion topics including
those which are private to the
Spinning a Northern Web
Research Study

Appendix B

Check List for Spinning "Screening" Phone Interview

Date: _____ Time of Call: _____ Best Time/Day of Week to Call:_____

Participant Name: _____   **Age:** ____

Address: _____   OK to leave message: Yes _____ No _____

Phone: _____   **Fax:** _____

Email: _____   **Alternate Email:** _____

Internet Access: High Speed ____   **Dial Up** ____

Currently on WNN email list? ____   **If not, would you like to be put on?** ____

☐ Participant understands that the purpose of this project is to find out if the internet (using the Women North Network Email list, Website and WebCT Online Gathering Space) is useful for women in northern, rural and remote communities to work together to share information about health and wellness, to share resources and strategies and to organize to influence health and social policy

☐ Participant understands that participation requires 2 – 2.5 hours per week, at a convenient time for her, over a six week time period, likely beginning about the 2nd week of September and going to the end of October

☐ Participant feels confident that she has the basic computer skills and internet experience required to participate – uses computer, email and internet regularly

☐ Participant has consistent access to a computer

☐ Participant understands that they will be part of a Women North Network Email list where they will receive information about women's health and wellness and have the opportunity to post information and comments. It is expected that they will be able to check email at least one or two times per day

☐ Participant understands that they will learn about and participate in the WNN Online Gathering Space – a private, password protected internet based space using the UNBC Distance Learning tool - WebCT

☐ Participant understands she will participate in discussion forums and other activities i.e.: chat forums, email,

☐ Participant understands that data collected in this study will be drawn from email communications, postings to discussion and chat forums, her feedback and observations of the researcher. These will be downloaded and saved in password protected files on the researcher's computer and only the researcher, her faculty supervisor and research assistant will have access to it. Any paper copies of this information will be stored in a locked file cabinet in the researcher's office.

☐ Participant understands that the information will be analysed by the researcher in consultation with a faculty supervisor. Participant information will be combined with the information received from others who participate in this study. What is learned about any participant's experience will be reported in a final research report, academic journals or at professional conferences, but without information that could identify the participant as an individual.

☐ Participant understands that she will be asked to provide feedback about her experience of participating in the WNN through questionnaires and discussion forums

☐ Participant understands that there are no known risks associated with her participation.

☐ Participant understands that there will be no costs for her, nor will she be paid for her participation.

☐ Participant understands that she may stop participation at any point in the study

☐ Is there's anything else you'd like to tell me about yourself that you think might be relevant to your participation in the project?

☐ Does participant have any questions?

Appendix C

Cover Letter for Participant Package

Spinning a Northern Web Project
CHRISTINA MCLENNAN BSW, MSW (CANDIDATE)

September 14, 2004

(Participant Address)

Dear (Participant Name);

Welcome to the Spinning a Northern Web Research Project. Through your participation in this project, we hope to further develop the Women North Network in ways that are meaningful and valuable for women living in the North.

Enclosed with this letter you will find the following:
- Information Sheet
- Informed Consent Form
- Stamped, addressed envelope.

As mentioned during our recent communications, before the project may begin, I must receive a signed Informed Consent Form back from you. Please read the Information Sheet and sign the Informed Consent Form and return it as soon as possible. The information sheet is yours to keep.

Please send an email to: saying that you have signed and sent the Informed Consent Form.

Once again, thank you for participating in this project. I look forward to working with you.

Yours truly,

Christina McLennan

Appendix D

Information Sheet for Participants

Spinning a Northern Web

INFORMATION SHEET FOR PARTICIPANTS

Study Title
Spinning a Northern Web: Women Using Information and Communication Technology to Network for Health and Wellness

A Thesis Research Project in the Social Work Program at UNBC

Purpose and Goals

The purpose of this project is to find out if the internet (using the Women North Network Email list, Website and WebCT Online Gathering Space) is useful for women in northern, rural and remote communities to work together to share information about health and wellness, to share resources and strategies and to organize to influence health and social policy.

The goal of this study is to explore and describe:
1. What supports women in using the Women North Network?
2. What information and resources do women gain from the Women North Network online strategy that they can use in their work and in their day-to-day lives?
3. What makes using the Women North Network Email List and Gathering Space worthwhile?
4. What specific things about the Women North Network Email and Gathering Space prevent women from using it?
5. How the Women North Network supports women in moving their political and social action strategies forward.

These questions will be explored entirely online using the Women North Network Email List and the Women North Network Online Gathering Space.

Participant Task Requirements and Project Duration

- You have been chosen for this research because you responded favourably to a poster or information sheet recruiting participants for this study.
- Your participation in this project is entirely voluntary and you have the right to refuse to participate in any activity or respond to any question.
- There are no known risks associated with your participation.
- There will be no costs for you, nor will you be paid for your participation.

- You have the right to withdraw consent and discontinue your participation at any point in the study.

Participation in the project will require:

2 – 2.5 hours per week over a six week time period. Within that time framework and at a time that is convenient for you, you will be asked to:

1. Participate in the Women North Network Email list where you will receive information about women's health and wellness and have the opportunity to post information and comments
2. Learn about and participate in the WNN Online Gathering Space
3. Participate in discussion forums and other activities that are decided upon by the participants and researcher as a group
4. Provide feedback about your experience of participating in the WNN

Anonymity/Confidentiality and Distribution of Research Findings

Your privacy and anonymity will be protected. All of the researcher's observations and all of the information you provide through email, discussion forums, questionnaires, chat discussions, and feedback will be compiled, downloaded and stored in password protected computer files on the researcher's computer and will be removed from the WNN WebCT space at the end of the six weeks. Any paper copies of your responses will be stored in a locked cabinet in the researcher's office until the project report is complete.

You will be provided with an anonymous "Spinner" User ID and you will have the choice to participate in anonymous activities.

The information will be analysed by the researcher. Your information will be combined with the information received by others who participate in this study. What is learned about your experience of participating in the Women North Network will be reported in a final research report, academic journals or at professional conferences, but without information that could identify you as an individual. Once your information is "put into" the study, it can no longer be identified as yours.

A final copy of the research report will be sent to you by email and will be available for download from the Women North Network Online Gathering Space. A hard copy of the report will be sent to you if you contact the researcher (contact information below).

Information stored on the researcher's computer or hard copies of research information will be destroyed within 5 years, by permanently deleting files from computer and hard copies will be shredded.

Preliminary findings will be provided to you for feedback via email throughout the project and a summary of the research results will be available to you upon completion of the study.

Researcher and Supervision Information

If you have any questions or comments or know someone who might like to participate in this project....
Please Contact:
Researcher: Christina McLennan, Social Work graduate student at UNBC

If you have any concerns about how this project is being conducted, you may contact:
Thesis Supervisor Dawn Hemingway, Social Work faculty member at the University of Northern British Columbia who can be reached at:
or
Vice President, Research, Dr. Max Blouw, at the University of Northern B.C.

Appendix E

Informed Consent Form

Spinning a Northern Web

INFORMED CONSENT FORM

The purpose of an informed consent is to ensure that you understand the purpose of the study and how you will be involved.

Study Title: Spinning a Northern Web: Women Using Information and Communication Technology to Network for Health and Wellness
A Thesis Research Project in the Social Work Program at UNBC

Purpose

The purpose of this project is to find out if the internet (using the Women North Network Email list, Website and WebCT Online Gathering Space) is useful for women in northern, rural and remote communities as they work together to share information about health and wellness, to share resources and strategies and to organize to influence health and social policy. (More details are available on the information sheet).

Task Requirements and Project Duration

Participation in the project will require:

2 – 2.5 hours per week over a six week time period. Within that time framework and at a time that is convenient for you, you will be asked to:

5. Participate in the Women North Network Email list where you will receive information about women's health and wellness and have the opportunity to post information and comments
6. Learn about and participate in the WNN Online Gathering Space
7. Participate in discussion forums and other activities that are decided upon by the participants and researcher as a group
8. Provide feedback about your experience of participating in the WNN

Right to Withdraw

- You have been chosen for this research because you responded favourably to a poster or information sheet recruiting participants for this study.

- Your participation in this project is entirely voluntary and you have the right to refuse to participate in any activity or respond to any question.
- There are no known risks associated with your participation.
- There will be no costs for you, nor will you be paid for your participation.
- You have the right to withdraw consent and discontinue your participation at any point in the study.

Anonymity/Confidentiality and Distribution of Research Findings

Your privacy and anonymity will be protected. All of the information you provide through email, discussion forums, questionnaires and chat discussions will be compiled, downloaded and stored in password protected computer files on the researcher's computer and will be removed from the WNN WebCT space at the end of the six weeks. Any paper copies of your responses will be stored in a locked cabinet in the researcher's office until the project report is complete.

You will be provided with an anonymous "Spinner" User ID and you will have the choice to participate in anonymous activities.

Preliminary findings will be provided to you for feedback via email throughout the project and a summary of the research results will be available to you upon completion of the study.

Researcher and Supervision Information

**If you would like to know more about this project, please contact researcher:
Christina McLennan, Social Work graduate student**

If you have any concerns about how this project is being conducted, you may contact:
Thesis Supervisor, Dawn Hemingway, Social Work faculty member at the University of Northern British Columbia who can be reached at:
or
Vice President, Research, Dr. Max Blouw, at the University of Northern B.C.

I have read the information sheet and consent and am willing to participate in this study as described. I am aware that I may discontinue my involvement whenever I wish.

Date_____

Name_____Signature_____

Address: _____

Phone: _____ Email: _____

Appendix F

Introductory Questionnaire

Spinning a Northern Web

1. In what ways do you currently use the internet (e.g., email, chat, instant messaging and/or browsing)?

2. In what ways do you use the internet to find out information about health and wellness?

3. In what ways to you use the internet to stay in touch with family and friends?

4. In what ways is the internet useful in your work?

5. In general, do you think that the internet and email are useful to you? Why or why not?

6. What are some of the things that make it easier or make it harder for you to use the internet?

Appendix G

Research Questions Posed in Phase 3

Five Research Questions from the Statement of Research Problem

1. What supports women in using the WNN?

2. What information and resources do women gain from the WNN online strategy that they can use in their work and in their day-to-day lives?

3. What makes using the WNN Email List and Gathering Space worthwhile?

4. What specific things about the WNN Email and Gathering Space prevent women from using it?

5. How does the WNN support women in moving their political and social action strategies forward?

Five Research Questions Posed to Spinning Participants:

The original questions were presented to participants within the context of project to date as it had unfolded:

1. The original first research question is: What supports women in using the Women North Network? Through your participation in the Spinning a Northern Web project, you have experienced some of the features of the Women North Network - email, Website and WebCT Online Gathering Space. I would like to know what you like about being part of the Women North Network and what things you look forward to because you are a member of the network. Any and all thoughts on this will be most appreciated! Your feedback on your experiences (and anything else you wish to share) will be very important in making recommendations on how the Women North Network will be further developed.

2. Here is the second research question that I would like you to discuss and/or respond to.

   I would prefer if you would answer/discuss this question using in the Discussion Forum: "Spinners Research Questions to Explore", however, if you would prefer you can respond directly to me by replying to the email message I sent to each of you.

   This is the original research question:

   What information and resources do women gain from the Women North Network online strategy that they can use in their work and in their day-to-day lives?

What specific things do you find helpful in terms of information and resources, that you have learned about since you became a member of the Women North Network and when you became a participant in the Spinning a Northern Web Project.

Examples of the things I am talking about are:

- News items that are sent out by email
- Information and weblinks found on the Women North Network Website.
- Information etc on the Women North Network WebCT Online Gathering Space
- Profiles of other women around the north
- Links to specific documents on things like poverty and violence against women
- "Search" tool to find specific things on various topics
- How To Library and Tutorial
- Learning more about things going on in other communities
- Anything else that provides you with new information, resources or ideas

Also, please tell me any ideas you have about how we could be using the email, website and WebCT to share information, resources and ideas.

3. The third research question is:

What makes using the Women North Network Email List and Gathering Space worthwhile?

When I think about the things you have talked about over the past few weeks, I would like you to consider the following things when responding to this question. When you are on the Women North Network Email List you received a few email messages per week that give information on women's health for example you receive the "Well" newsletter, information from Women's Health Matters etc.

The Spinning a Northern Web Email List with its many email messages was specific to the project, however, you also received the "news" items that I sent out on the Women North Network Email List.

Currently, those news items are now being posted to the WebCT online gathering space. So with that in mind, please specifically identify what you feel are worthwhile about being on the Women North Network Email List, receiving a few news items a week.

Then I would you to think about what specific things you feel are worthwhile about the WebCT Online Gathering Space. If you need any further information on this question please send me an email.

4. Here is the fourth research question.

I think you have replied to the things about the email that you don't like, however, if you have other comments please tell me about them. I still don't have a clear picture of what

prevents you from using either the Website or the WebCT Online Gathering Space. This can be things in your work or personal life, technological issues or just things that you don't find particularly useful or attractive.

Suggestions about how things are organized are also appreciated.

Please respond to and discuss this question on this discussion forum or if you do not wish to reply in the discussion forum please respond directly to me by email.

Here is the question: What specific things about the Women North Network Email List, Website and WebCT Online Gathering Space prevent women from using them?

5. Thanks for your feedback and discussion on the research questions so far.

As with the other questions I hope that you will consider answering in this WebCT Discussion Forum, however if you do not want to do that, please reply to the email message with your response.

The fifth question that this research project asks is: How does the Women North Network support women in moving their political and social action strategies forward?

Specifically identify ways that you see women in northern BC using the Women North Network to work together to address health and social issues and to support one another in doing that.

If you have been participating in the "Spinners Taking Action" Discussion Forum and Live Chat Sessions please reflect on your experience when responding.

If you have not been able to participate in the Taking Action activities, please reflect on the ways that you think the Women North Network Email List, Website and WebCT Online Gathering Space could be used to connect women on common issues and provide your thoughts, feelings and feedback on that.