

TVcalls and Reacquainting Visits: Video Conferencing with Long-Term Care Residents

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by
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*In this day and age we must use every means available to us to create and promote **dohavkee** connectedness in this world.*

- Dr. William Thomas, Eden Alternative founder
(Learning from Hannah: Secrets for a Life Worth Living, p.226)

Learning is not just about education, it is about healthcare and living itself.

- Peter Jarvis, Adult Educator
(Learning in Later Life, p.138)

Stories have the power to direct and change our lives.

- Nel Noddings

And we will be able at some point to ask of our story: Have we authored our work in such a way that lives have changed for the better....

- Kathy Carter

ABSTRACT

A long-term care resident sits in front of a TV. With the push of a remote control button she instantly sees and visits with her children and grandchildren over 500 miles away. She last saw them on her 80th birthday, four years ago. She and her family are participants in a social action inquiry that explores video conferencing in order to understand the value of technology enhanced face-to-face interaction in a long-term care home.

This research, designed as a compassionate response to the serious problems of isolation, loneliness, helplessness, and boredom in long-term care, set out to determine what video conferencing can mean to long-term care residents and to the people they connect with. The study queried possibilities for improving the quality of social interactions of residents in long-term care facilities with family members living at some considerable distance from them. It involved setup of technical equipment, then three residents in a long-term care facility in western Canada were introduced to the practice of video conferencing with their families. Each conferencing event was supported with volunteers for a three-four month exploration period.

The research was intended to contribute to knowledge about learning in later life, to promote a way of increasing communication between the elderly and younger generations, and to address issues associated with elderly long-term care residents' access to video conferencing technology.

Data collected through memory logs, observations, and interviews indicates that all study participants, including residents, family, and volunteers, responded favourably to the video conferencing experience. This study supports the claims that video conferencing can increase the frequency of contact between long-term residents and family members, and that the quality of this contact is enhanced through the visual presence and engagement of participants, through use of video conferencing technology. The video conferencing enabled family members separated by distance and unable to visit frequently to take on a "regular visitor role" and for residents to go visiting. The visually enhanced communication / visits transformed the otherwise limited audio interaction of phone calls or no interaction into socially substantive experiences of connectedness, inclusion about which residents reported feeling excited and connected with something to look forward to.

This suggests video conferencing could contribute to a good quality of life for residents. Future communications infrastructures should seriously consider inclusion strategies and availability of effective applications to long-term care residents.

Keywords: Quality of Life, Family, Intergenerational Relationships, Video Conferencing

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CHAPTER 1 - INTERACTIONS FACE-TO-FACE: VIDEO CONFERENCING WITH LONG-TERM CARE RESIDENTS

What is video conferencing? Why pursue it with residents in a long-term care home context? A video conference is where two or more people at different locations can see and hear each other at the same time. It allows for two-way interaction among participants while those participants are at different locations (Havice, Isbell, Grimes, & Wilson, 2004). Thus video conferencing technology enables “face-to-face” interaction at a distance. The phrase face-to-face means in the actual presence or with faces toward each other.

This visual interaction feature is why video conferencing is intriguing and actively pursued within the field of education. Mathews (2004) explains,

“For those who point to distance learning completion rates that run much lower than traditional courses, a culprit most commonly cited is the awkward and sometimes stilted nature of distance interaction. Human beings are social animals. We thrive on face-to-face interactions, and that has been difficult to deliver via keyboard or mouse click alone. Two-way video links allow trainers and teachers to see their learners as they work and interact with them in something not all that far removed from what happens when people are in the same room.” (p.102)

In other words, the addition of real-time visual (live video) in conjunction with the audio creates a feeling or simulates you are there in person, in the actual presence. This feeling or phenomenon is well documented. (Gilham, 2001; Kaufman & Brock, 1998; Swift, 1988; Whitten, 1998) Gilham (2001) claims the benefit of video conferencing is the “being-there” feeling of seeing and hearing. This visual connection and interaction assists participants experience a sense of connectedness.” (p.29)

Peterson (2004) claims the potential to create distance-learning environments that emulate the traditional classroom and maximize interactions has become practicable through the use of technology tools such as video conferencing. While this thesis is not concerned with traditional classrooms, it is focused on learning in the social context (Jarvis, 2001). It is concerned with maximizing interactions to enliven nursing home environments where medical care has taken precedence in their design while the social needs of long-term care residents have received much less attention. (Hajjar, 1998; Kane, 2003; Kane & West, 2005; Thomas, 1996, 2003)

Failure to thrive is a phenomenon documented among older adults in residential care. Researchers associate this failure to thrive with the dull, cold, and standardized environment of some nursing homes that “summarily strips individuals of their uniqueness and withholds the warmth and stimulation of a true home where souls are nourished and human development is nurtured” (p.71, Gaugler, 2005). All new residents of a nursing home can expect communicative relations to undergo significant upheaval upon entry. Hajjar (1998) explains, “the change of residence means almost complete loss of personal possessions and a radical restructuring of daily routines. It means new care takers will assume control over multiple activities of daily living, resulting in a loss of privacy and a forced intimacy with caregivers and other residents.” (p14). Nussbaum who has examined the communicative environment of the elderly found that the elderly living in the long-term health care facility suffered “*interactional starvation*” and the “nursing home environment negatively influences the interactive behaviour of the elderly residents.” (p.196, Nussbaum, Thompson, & Robinson, 1989) Similarly, Kaakinen (1992) found that there is a tendency for cognitively intact residents to talk less once admitted to a nursing home. Residents without dementia revealed in interviews the following unspoken rules about talking:

1) Do not complain; 2) do not talk with the opposite sex and if you do keep it to formalities only; 3) do not talk about loneliness or dying; 4) do not talk too much.

Perceived self-regulatory statements were: 1) Residents ignore those they perceive to be senile; 2) residents avoid talking with hearing-impaired residents; 3) residents don't talk with others for fear of social consequences or to avoid a social confrontation; 4) residents talk with those who demonstrate a willingness to talk to them.

These comments highlight the need for staff and family to initiate conversation with residents. Factors that influence family involvement in long-term care settings include: pre-admission telephone contact, geographic proximity, facility characteristics and policies. (Gaugler, 2005; Gladstone, Dupuis, & Wexler 2006) Family involvement research has focused on frequency and quality of in person, face-to-face, visits but there exists no literature on the use of video conferencing by residents in long-term care facilities. So, what happens or is available for residents whose families live at a considerable geographical distance?

The telephone is a seemingly obvious important functional alternative to face-to-face interaction for many elderly people. Granted, video conferencing did not exist at the time of the Bleise (1982, cited in Nussbaum et al., 1989) study, nevertheless, nearly 90 percent of the 214 elderly interviewed, reported using the telephone to keep in contact with family and to check on their friends health and well-being; and 97 percent thought telephone conversations were as good or better than face-to-face conversations” (p.51). Important considerations not addressed by these figures include: reasons why the telephone was good or better (for example, the values of telephone conversations could vary among those with or without drivers licences or access to other forms of transportation); whether this response is from the perspective of the elderly person who made and/or received the call; and the elder’s living situation (at own home, homebound elderly, assisted living, or nursing home residents). Kane and West (2005) describe a problem with telephones, which I can attest to, as it is similar to the situation in my grandmother’s nursing home.

“Sincerecare [the nursing home] was clearly primarily a health care institution. Social amenities were an afterthought if they were thought of at all. For example, there were no provisions to facilitate calling in on the telephone. To speak with Robert [her son], Ruth [the nursing home resident] had to be wheeled to the nurses’ station and handed the telephone there, which had a short cord. No cordless telephones were available.” (p.106)

Televisions abound in nursing homes. Watching television also substitutes for interpersonal interactions when face-to-face interaction is unavailable. Both Hajjar (1998) and Nussbaum et al. (1989) indicate television is used by the elderly to fend off loneliness and as company, for

entertainment, and to provide informational content for use in future conversations. In fact, Hajjar (1998) found watching television is the most prevalent and pervasive activity for long-term care residents; among the most popular shows, reruns of *The Lawrence Welk Show*, which still airs on Saturday and Sunday nights on PBS (public television). She also claims that television has a special appeal to the elderly due to their availability and ease of use. Kane and West's (2005) description of their mother's group activity experience in a nursing home, underscores the need for interaction and meaningful individualized activities for residents, which may or may not include television.

“Because they (the staff) did not want her in a room alone where she could not be observed, she became part of a group of residents seated in front of the nursing station. Just across from the station was an open area with a TV set that played movies and programs. About a dozen wheelchairs were always lined up in front of this set with people staring vacantly at it, including our mother, who had long ago seemed to lose all interest in TV.

She looked as out of it as anyone, yet when someone went to her and roused her she would respond. Even people who are as severely cognitively impaired as Ruth (their mother) was **can interact**, but it takes **intensive individual efforts**. Keeping people by the nursing station is supposed to help with that interaction, but it does so **only if someone makes the effort to talk to them.**” (p.109, bold added)

Television can enhance the viewer's engagement in the world and connections with other people, but as Roberts (2001) observes most of the bonds that are experienced as a result of simply watching television are one-sided, with no possibility for interaction. While online services allow for reciprocal interactions with others, especially through e-mail, and chat rooms, Roberts points out, “many elderly people do not use the internet due to lack of instruction and accessibility” (p.99). Nui (2006) concurs.

A growing body of literature suggests that the use of computers and the Internet may enrich the institutional living environment and enhance long-term care residents quality of life (Chaffin & Harlow, 2005; Namazi & McClintic, 2003; Tak & Beck, 2007; York, 2003). The researchers Tak and Bek recognize family contact, mental stimulation, and enjoyment as three major benefits for residents in long-term institutional care (Tak & Bek, 2007). To date, however, there is only modest evidence that the potential of technology for improving the quality of life of older adults

is being realized (Czajz & Schulz, 2006). Access to technology and ageist attitudes constitutes the main challenges and barriers to improvement in this area (Cutler, 2005; Czajz & Schulz, 2006; Nui, 2006; Tak & Bek, 2007).

It is very clear that the video conferencing technology exists. One simply has to turn on the television to see commercials for video cell phones, which target young adults. At the same time a growing body of literature is showing up in education and health sectors on video conferencing, exemplary projects that demonstrate the values of video conferencing technology are very close to home. For example, there are the University of Saskatchewan's Web Conferencing Pilot Project 2005-2006 (On Campus News, September 24, 2005 and January 20, 2006, www.usask.ca) and Saskatchewan Health's telehealth initiative, which provides medical assessment on-line throughout the province using video conference technology (Dowler, 2005). Thus as patients, long-term care residents have used video conferencing (Wakefield, 2004). However, as individual persons interested in learning more about video conferencing and connecting with family no examples exist in the literature. A wider view of the possibilities for video conferencing is required, if the potential of this technology is to be realized for elderly long-term care residents.

Originally titled Interactions Face-to-Face, this video conferencing study/initiative, is an act of inclusion. It includes long-term care persons in the technology age. Inclusion means "openness to variety and difference with a sense of including all in a manner which attends to the uniqueness of each and every member" (O'Sullivan, 2001, p.247). Because the elderly have not been an important economic or social concern, their problems and issues often go ignored. (Cutler, 2005; Kane, 2003; Kane & West, 2005; Nussbuam et al., 1989)

1.1. Why Study Quality of Life?

Longstanding, widespread beliefs exist among many lay and professional people alike that life in nursing homes is miserable. (Kane, 2003; Kane & West, 2005; Martin, 1999; Rosher & Robinson, 2005) It is often associated with prisons and with situations worse than death. (Goffman 1961; Thomas, 1996; Mattimore, 1997 cited in Kane 2003) Residents in long-term

care deserve better. Quality of life needs to be addressed for these overlooked, marginalized individuals. Up until very recently, little was done to actively ameliorate this predicament.

Elm and Johnson (2000) who write about using technology to promote quality of life and best practices in the context of a long-term care facility, use the definition of quality of life provided by Raphael et al., (1994, 1996). In this definition quality of life is “the degree to which a person enjoys the important possibilities of his/her life. Possibilities refers to opportunities and constraints within one’s environment, where as enjoyment refers to the degree of satisfaction experienced by the person” (p.319). In their explanation of this definition, Raphael et al. emphasize its individualized subjective nature, “Quality of life differs from person to person based on experience” (p.320). They describe three aspects of quality of life as: *being* (who people are as individuals), *belonging* (how people fit with their environments), and *becoming* (what people do to realize their hopes and goals and includes learning and adapting which they refer to as growth) (p.320). Elm and Johnson made no reference to residents’ direct use of technology to enhance their quality of life in the long-term care context. By definition, then this may be a constraint within the long-term care environment, one that I speak to throughout this thesis.

To further clarify my stance on quality of life and rationale for this study three key points are outlined. First, quality of life has been narrowly defined in long-term care related literature as relating to health (HRQOL) and various measures for HRQOL are available (see Kopec and Willison, 2003). However, there is more to quality of life than its health-relatedness (R.A. Kane, 2003; R.L. Kane & West, 2005; Lawton, 1997; Mosher-Ashley & LeMay, 2001; Williams, 1990). A person is admitted to a long-term care facility for medical reasons (poor health) but there is ample literature to show that their quality of life suffers upon admission. Where someone lives or chooses to live have an effect on their perceived quality of life. The social and physical environment must be taken into account.

Second, the most cherished desires of residents are very likely to preserve the best quality of life and create a feel of home. Thus opinions of elderly residents and their families should be sought. Interestingly, Robichaud, Durand, Bedard, and Ouellet (2006) queried how can seniors maintain

their autonomy and self-actualize while ageing in a substitute home. Their findings, gathered from 27 participants: 19 elderly residents and eight family caregiver from five nursing homes, indicate divergent opinions between residents and families. While family members focused on physical environment (i.e. need for more space to move around with a wheelchair, need for more privacy), residents spoke more frequently about relationships. According to the residents, the human environment should “give them an opportunity to share enjoyable moments, take care of others, feel like part of a group, feel respect within a relationship” (p.248). Most relevant to my study and one of the most salient comments which I have come across in literature on quality of life is a resident’s request, “Visit so I will know I am alive” (Kane, 2003).

Comparable resident sentiments were revealed in Mosher-Ashley and Lemay’s (2001) study where 131 cognitively alert older adults living in long-term care facilities were individually interviewed about their general satisfaction with life in the facility. The characteristics of their facilities which residents most liked were: the other residents and staff, the general comfort or atmosphere of the facility, and its activities. The changes that residents desired were: more family visits, more suitable surroundings, and more privacy. I believe the residents’ experience is authoritative. I take issue and am enraged by the authors’ recommendation to staff regarding family visits which was as follows:

“While many residents desire more visits by family, their life satisfaction doesn’t suffer when there is a lack of them. Family visits, then, are something desired but not essential. Direct care staff are advised to work on their relationships with the residents and not worry about the lack of visitors.”(p.54)

This attitude/approach not only negates residents’ valuable opinion but the underlying message is that family relationships and family involvement in the long-term care setting is not that important. Such a directive does not foster good relations. That some staff view and care for residents like family (Gass, 2004; Gaugler, 2005) is a positive move towards improved quality of care and quality of life but wouldn’t residents be better served if their relationship with family members were also nurtured and supported following relocation to a nursing home? The system is difficult for residents and families to negotiate.

Third, family involvement in long-term care settings relates to quality of life. Rosalie A. Kane, a well-known gerontological social worker renowned for her work in the area of quality of life of nursing home residents indicates “quality of life in nursing homes is a product of at least four factors: the resident’s health status, social situation (including his/her family support from outside the nursing home), personality, and the care and environment offered in the nursing home” (Kane 2003,p.35). Note, quality of care does not equal quality of life. It is a component. Thus, in terms of bringing long-term care and a good quality of life closer together, consideration must be given to factors extraneous to formal care. Kane (2001) acknowledges, “the presence of caring friends and family, will have a strong effect on quality of life” (p.298, Kane, 2001). Nussbaum, Thompson, and Robinson (1989) also claim, “For years research has shown that familial relations are an important contributor to the well-being of the elderly. They cite numerous documented studies (p.195). How or in what ways?

Focused on visiting patterns, Gladstone, Dupuis, and Wexler (2006) direct attention to research that suggests “**continued, valued** family involvement can be beneficial to both residents and the family (i.e. higher morale, more attention from the staff, higher overall quality of care, and improvements in emotional well-being)” (p.95, bold mine). Recounting their family’s experience with their mother in a nursing home, Robert L. Kane, a highly experienced physician and gerontologist who holds an endowed chair in long-term care and aging at the Minnesota School of Public Health, together with his sister Joan West, an educator and the “primary” family caregiver, list similar points as important lessons they learned.

- (1) Informal caregiving, the jargon for family care never stops, even after a person enters a nursing home.
- (2) Residents whose family members visit regularly do better than those who have few visitors.
- (3) Nursing home staffs are more likely to pay closer attention to residents whose family is around and observing.
- (4) Nursing home residents need active family advocates. Like it or not, squeaky wheels do get the grease.

(Kane & West, 2005, p.115)

From an extensive review of the research literature on family involvement, Gaugler (2005) found residents who had “met their desire for visitors” were more likely to report higher life satisfaction. Studies which involved family members’ narrative accounts about visits revealed

that family members did not talk about their involvement in terms of task allocation but rather by purpose. “Family members emphasized that their main goal when helping residents in nursing homes was to preserve the identity of the older relative” (p.7). Family member comments in a Gladstone et al. (2006) study revealed similar findings. They found the type of care and support provided to a relative (the resident) by their families was wide-ranging and included preservative care; for example maintaining a relative’s connectedness to family (i.e. letter writing) and preserving a relative’s dignity. Because family resident relationships have their origins in lives prior to admission like the rest of us, they rely on important, continuing personal relationships to maintain meaningful lives.

The assumption often made in family involvement literature is that increased family involvement is positive and leads to quality of life and quality of care for residents (Gaugler, 2005). I make the same assumption in this thesis. Research on the benefits of family involvement with long-term care residents is limited since most of it has focused on “primary” family members, that is the one family caregiver most involved with the resident following admission to the nursing home (Gaugler, 2005, p.12). This study, however, explores a strategy to increase family involvement beyond the “primary” family member.

This thesis, therefore, begins with the hypothesis (projecting speculative possibilities) that video conferencing offers a means to increase family presence and meaningful interaction of long-term care residents by providing them face-to-face interaction in real-time with family (and/or friends) who do not live in close proximity to the long-term care home. It assumes isolation, loneliness, helplessness, and boredom to be serious issues for residents in long-term care (Grainger, 1998; Harper Ice, 2002; Thomas, 1996). The purpose of the study is to understand the value of technology enhanced face-to-face interaction in the context of a long-term care home.

The study was conducted with three goals in mind:

- To provide an alternative means for residents to connect and/or to stay connected with family and friends with whom they are unable to visit regularly because of the separation created by their residential arrangements;

- To explore video conferencing with residents as a compassionate response to isolation, loneliness, helplessness, and boredom in long-term care;
- To increase face-to-face interactions with residents in long-term care.

The study was designed as a relational model of action research to occur over a four-month period with the following objectives:

- To provide residents in one designated long-term care home hands-on experiences communicating with their families (or friends if desired) by using video conferencing technology over a three to four month period;
- To create an understanding of the concept of video conferencing;
- To document initial reactions, thoughts, observations and ideas of residents, family, and assisting participants in the project in regard to video conferencing in a long-term care home context.

The study was guided by the following questions: What happens when three long-term care residents are given opportunities to use video conferencing technology to communicate with their families (or friends)? What does the video conferencing experience mean to them and to the people they connect with in the process (i.e. family, friends, and volunteers)?

The study was approved on ethical grounds by the University of Saskatchewan Behavioural Sciences Research Ethics Board, on September 19, 2005, (see Appendix E) and the designated Long-term care home Ethics Board on November 1, 2005. (Copy shown to thesis committee and kept in agreed upon location but not enclosed to protect the participants anonymity.)

Interactions Face-to-Face is the name I gave this study when I was writing proposals, and recruiting participants. This title encapsulated what I perceived as the special qualities that video conferencing offered long-term care residents and their family: Video conferencing is interactive, visual, live (in real-time). In proceeding with this four-month exploration of video conferencing, I sought the perspectives of both residents' and their families'.

The title of the thesis is *TVcalls and Reacquainting Visits* because these are the terms that two long-term care resident participants coined to describe their video conference experiences with family. One resident participant did not experience a family video conference within the four month trial period, her story of the Young and Restless highlights some of the challenges encountered in attempts to include her in the study and is presented in chapter five with the other participants' stories.

To report the research findings, this thesis is divided into six chapters. In the remainder of this chapter, I present my personal journey to get video conferencing setup in a long-term care home. Then, in chapter two, I present findings from previously researched computer projects involving frail seniors in long-term care to further justify this video conferencing study. In chapter three concerns related to living in traditional long-term care are discussed such as loneliness, helplessness, and boredom, then a brief description of a cultural change initiative, the Eden Alternative is presented. Chapter four reviews the technical setup and methodology as a relational model of research; Chapter five presents participants' stories of video conferencing experience with family; and chapter six discusses the findings, sustainability of this project, as well as areas for further study.

1.2. Grandmother's Story

To illustrate the seriousness of the predicament that elderly people, particularly those living in nursing homes/ long-term care homes , are presently in, I share my grandmother's story. She has profoundly influenced my desire to pursue this particular graduate work, focused on video conference visits with long-term care residents.

I remember visiting with my grandma as a young child and over a traditional cup of tea before bed, she once told me of a place she used to go to visit as a volunteer. It was that large brick building just outside of town that she and the ladies club went to visit regularly. She told me of the people once kept in the basement, the retarded and severely mentally ill; some wore no clothes; some wore chains attached to beds; some were wild like animals; some didn't acknowledge the world around them. They were just left there. It wasn't a

nice place and it was hard to go there. “We went because there were people in the basement,” she said. “We went to visit people.”

In 1999 my grandmother was forced to live just *one floor up* from the basement, in that very building she described. It was then that the total institution from more than 50 years ago became a haunting reality for grandma and a major concern to me. How much has changed in 50 years? The building is no longer a mental asylum; the name has changed along with the people who occupy the building. It is now a long-term care facility that provides “care” to the elderly with major physical and/or mental disabilities. But this change is not enough; the negative effects of isolation and the medical model (a facility that is run like a hospital) still linger in this institution. The dilapidated building is symbolic of our treatment or lack of care for the elderly but is not representative of the potential of the elderly people who live in this facility. My grandmother’s chronicle has solidified my belief in the significance of interaction between generations and the urgent need for a compassionate response to geriatric needs.

I remember going to visit grandma in that dilapidated large brick building hidden from the main road, just off the highway. It was difficult to go there but we wanted to see grandma. Mom, dad, my two young girls, and I had driven down so I could meet with some people there about a computer and video conferencing.

We arrived to find grandma and other residents, once again, quietly lined up, facing the tall half wall of the nurses’ station. Behind that wall was a “work” computer with Internet access. For three years, grandma had sat there physically tied to her wheelchair, lonely and bored. Family was unable to visit face-to-face as often as we would like. Well meaning staff said she had “adjusted well”. But from what I saw, along with the stories grandma told me, and the tone of grandma’s voice when we visited, it would be more accurate to say that this mindful volunteer from years before was frustrated, angry, and losing hope.

I went to the top floor. Administrators sitting at their computers already connected to CommunityNet, indicated to me that it would be difficult to get a computer with Internet access set up in that “old building”. An IT Support staff eventually offered to assist BUT it would have to be after hours, as this was not related to his work. There was no incentive or sense of urgency to provide access for the residents. We didn’t see eye to eye.

Grandma required help physically after having a stroke, which is why she was admitted into long-term care. But this was not the place she chose, she had specifically requested a different nursing home, where her sister was. In fact, some of her belongings were moved to the other facility. With her she had family photos, one piece of furniture, and a television. Given that her mind was strong, it was exceedingly traumatic to be placed in the former mental asylum. On more than one occasion she told me, “At 85+ my mind is one of the only things that isn’t failing me. I don’t belong here.”

Grandma’s home was very different from the place she spent her final three years. And when I think of the last place I feel anxious, sad, angry, and yes guilty. She was notably unhappy and deserved better. It was not a comfortable happy place nor was it the least bit private. In addition its history and appearance did not conjure up images or thoughts of an open, inviting space with lots of interesting things to see and explore, rich with family history, as I recall hers to be. No in this place, some of the windows had what appeared to be chicken wire across them and others were barred, remnants of the days when this place was the mental asylum. How does or could one, gain a positive sense of place here? I was confronted and afflicted by the negative images and reality of this institution and our situation. I was such a long ways from grandma’s and what broke my heart was knowing, so was she.

It was during the darkest of times, while my grandma was in that horrible place, she described, that I first learned about the Eden Alternative. Training in the Eden Alternative provided hope and a recognition that positive changes in effort to address quality of life are being made in some long-term care facilities. “*It can be different*” is the Eden Motto. “*Access to ICT (Information and Communication Technology) could make a difference!*” I believe (d).

Between the two of us our preferred means of communication was never written mail. I had always talked to her on the phone or visited her in person. However, in the long-term care facility it was complicated for a number of reasons. She shared a room with two other residents. When we visited in person there was no place to go to visit privately. We went for tea in the common dining room but all the noise and interruptions would sometimes agitate her. Other times we sat together in the yard. The last time I recall that grandma, my girls, and mom and dad

sat there together was just after “the meeting”. We sat facing that large brick building, repositioning ourselves so the wind was on our backs.

My personal circumstances were such that I couldn’t travel the five hours to get to her place to visit as frequently as I would have liked. I had a very young family and I worked part-time. I wanted my children to know my grandma like they recognize their paternal great grandmother who lives nearby and they see regularly. I would call grandma and tell her what my girls were doing and how they had grown. My girls at the time, both under 2 years old, were amused by the sound of a voice coming out of the phone but they had no concept of who that person was nor were they able to carry on a conversation.

On a number of occasions when I phoned Grandma at the long-term care facility she directly confided she was lonely and bored. But Grandma never said she was helpless. She was a helper, she devoted her life to community service and the church.

Grandma raised ten children in the house grandpa built, a home they made, for the family in a small village with a church in the centre and a good school just down the road. They didn’t have a lot of money but managed. Grandpa built homes, schools, churches, and community centres; so did grandma in various ways.

She maintained their home, and assisted a few women in the community to keep theirs. She was also the secretary/treasurer of their village for twelve years, a school trustee, a member of the Homemakers’ Club serving as its secretary and president at various times, and she canvassed for numerous organizations throughout the years. Grandma volunteered at a senior citizen’s home, where she regularly helped residents with the morning routine - getting out of bed, dressing, eating, and on Sunday mornings she assisted with the home’s worship services.

The church was a large part of her community work. She sang in the choir, later played the church organ and was superintendent of the Sunday school until all her children were through the system. She was also a member of Ladies’ Aid (officially the Women’s Auxiliary of the United Church).

In her autobiography, she wrote about how she liked living in the house grandpa had built for the family. She wrote about spontaneous road trips to visit family, and her on-going involvement in the community after grandpa passed away: “I tried to keep busy with the Senior Citizen’s club which I had helped start. We had regular meetings and games. We went for group outings to various places.”

From her life experience, she knew how to chair a meeting, push an action agenda, and did not shy away from the work required to see it through. She remained true to herself and maintained neighbourliness even in the long-term care facility. For example, the flowers that she received monthly from family, she shared with other residents who did not have family or didn’t receive any. She also spoke out from time to time about concerns (i.e. moving of residents’ personal possessions and residents need for privacy). And most relevant to this thesis, she insisted, in our effort to get video conferencing technology set up for her to use with our family, that it be made available to more than just herself.

CHAPTER 2 - INTERNET ACCESS AND LEARNING IN LONG-TERM CARE

In this chapter I highlight and discuss what I uncovered in my review of literature regarding (1) internet access, (2) health benefits and the learning in later life connection, (3) documented internet access programs in long-term care facilities including comments from resident participants which have informed the structure of this video conferencing study, and (4) documented video conferencing. How the Interactions Face-to-Face video conferencing initiative is different from these documented projects is outlined at the end of the chapter. While there is a lot of information provided in this chapter relating to computer use, it is important to emphasize that the Interactions Face-to-Face Video conference initiative used a television and video conferencing camera, it *did not* use computers, but like the documented computer projects, it requires the high-speed internet access. By the end of this chapter it should be apparent that, within Saskatchewan, we are ahead technologically but behind in providing service to the elderly.

2.1. CommunityNet

CommunityNet, Saskatchewan's world-class, highspeed internet system is boldly promoted as "*Bringing the World to Saskatchewan*" and "*paving the way to better educational access and improved health services*". Ironically, it denies access to a most worthy group, elderly residents in long-term care facilities, despite its claim that "the benefits are available no matter what your age or where you live." (see www.communitynet.com) The use of the word "community" in the name is significant, significantly misleading. CommunityNet was used in my grandma's long-term care facility, but when I approached Administration and IT Support to make it accessible to her and the other residents, they indicated to me that resident use was not the intended purpose of its installation in the health facility. The Information Technologies Director of one Saskatchewan health region told me that resident access was denied to ensure the security of health records

information. Although Health Regions use CommunityNet for health services, for administrative purposes such as maintaining medical records, e-mail communication amongst health professionals, and in the development of Telehealth (medical assessment on line), senior learners/patients/residents in regional long-term care health facilities do not have the opportunity to use it. Health Regions refusal to provide internet access to patients/residents in long-term care facilities overlooks the health benefits associated with staying connected and learning.

CommunityNet is available in educational facilities and public libraries “to provide access to the Internet and the many resources it has to offer to people who may not have a computer in their home or workplace.” (www.communitynet.com) Long-term care facilities are home to many people who do not have a computer. However, getting to the library or a school is an additional challenge, which makes this option virtually inaccessible to many who live in long-term care facilities. Evidently, CommunityNet’s mandate to provide internet access for learning opportunities is juxtaposed with administrative users’ policy within the long-term care facilities. If the long-term care facility were to receive CommunityNet highspeed internet services, as a “learning facility” rather than a “medical facility” then the residents would have direct access to this valuable resource. As it stands, frail seniors are not recognized as learners or as requiring more than medical treatment and well-kept medical records. Thus, rather than paving the way to better educational access and improved health services, CommunityNet is another roadblock for senior learners in long-term care facilities. Access to this information communication technology is still inaccessible. Still, able to learn as well as teach, elderly, frail long-term care residents are an important part of my community.

2.2. Health and Learning in Later Life: Related Issues

Increasing social isolation for some seniors is associated with many adverse health outcomes, whereas satisfaction with social support networks has protective effects on both physical and mental health (Straka & Clark, 2000 cited McPherson, 1990). For those older seniors who experience both physical disabilities (i.e., visual impairments, hearing loss, mobility limitations, chronic pain) and reduced social contacts due to life cycle changes (i.e., death of peers and geographical distance from family and friends), the problem of social isolation is increased

(Straka & Clark, 2000). Social isolation is an objective concept, based on the quantifiable absence of contact with others. (Wenger & Burholt, 2004) It is associated with loneliness as is discussed in the next chapter.

Frail seniors in long-term care facilities, especially those with mobility problems, experience a significant narrowing of their worlds. Because familiar forms of stimulation and human relationships are not as easily accessible. As mentioned in the introduction and is discussed in depth in the next chapter, once admitted to a nursing home one is cut-off from the local community, separated from the things that bring meaning to ones lives, the things that are familiar and comfortable, enjoyable activities, family and friends. (Kane, 1995; Martin, 2003; Thomas, 1996) Granted, long-term care residents require on-going medical support and supervision, but as Kane and West (2005) indicate one should not have to choose between quality of care and quality of life. Having Internet access such as CommunityNet could assist in bringing the world to these people. They, in turn, would have more opportunity to interact and contribute to the global village.

Positive learning experiences have a positive effect on health and quality of life. The Canadian Council on Learning acknowledges active learning carries benefits for seniors,

“Engaging in active learning provides a means for remaining actively involved in the community, for developing new interests and for keeping up with younger generations. In short, people feel healthier, happier, more respected and more independent when they pursue active learning in their senior years.” (Niu, p.2, 2006)

Informal learning is a significant form of learning for many seniors. (Niu 2006, Clough 1992) Informal learning is learning that is not organized within a formal institution of learning (i.e. a school or university). It is more closely associated with acts of daily living. Examples of informal learning activities include reading books, magazines, newspapers, watching educational television and the news, visiting libraries, travelling, participating in senior centre activities, listening to the radio, observing nature and life, and participating in discussion with family and friends. Jarvis (2001) describes informal learning as “learning that occurs when a friend or a colleague provides an answer to a problem or shows somebody how to perform a procedure in an

informal manner” (p.21). Consequently, the people with whom we socialize provide some of the stimulus for what we learn and how we learn it.

Britain’s *Learning to Succeed* policy report indicates that older people who continue to be active learners enjoy healthier lifestyles and maintain independence much longer than those who stop learning (Jarvis, 2001). The National Institute for Adult Continuing Education in the UK (Aldridge & Lavender, 2000, as cited in Cusack, 2003) conducted a survey to determine the impact of learning on health, which involved 473 individuals aged 20-90 years old with half in the 40-60 age range. The reported direct health benefits included “reduced stress, reduced depression, feeling more positive, achieving goals and more energy” (Aldridge and Lavender p.25, cited in Cusack, p.394). Cusack (2003) highlights mental fitness research has made significant improvements in depression through the provision of positive mental stimulation. Despite an emerging body of evidence that suggests continuing mental activity can help sustain an active brain and delay its deterioration (Nussbaum, Thompson, & Robertson, 1998), there is little effort to provide learning activities (formal or informal) for some elderly (e.g., computer/internet access programs). Access to technology is among the top five barriers or challenges for seniors (Nui, 2006).

Isolation, depression, loneliness, (learned) helplessness and boredom are significant problems facing the elderly (as discussed in the next chapter); particularly those in poor health who can no longer live independently (Harper Ice, 2002; Thomas, 1996). The elderly living in nursing homes or in institutions that follow the medical model (meaning the institution is run like a hospital) are most at risk of depression and suffering (Grainger, 2000) a result of the negative effects of a sterile physical and social environment that is task-based rather than person centered. (Kane, 1995; Williams, 1990)

Montgomery and Koloski (1994, cited in Harper Ice, 2002, p.346) predicted that approximately 43% of adults over 60 years of age will spend some portion of their lives in a nursing home. Yet how many would choose to live their later years or any part of their life, isolated, depressed, lonely, helpless, and bored? No one deserves to live their later years as some seniors are presently living, through no fault of their own. Ageing is a developmental process of life not a

reason for inaccessibility or imprisonment. Ironically criminals in federal penitentiaries have more access to education than some elderly. What is the connection between ageing and prisons? Old age should be a more positive experience associated with the comforts of home and daily living. Yet some elderly are virtually given a death sentence by being put in isolation, the isolation of a total institution, where they wait to die. Their crime simply stated: they require help, more help than others to live.

2.3. Successful Internet Access Programs in Long-Term Care Facilities

One innovative and effective way to increase social interactions, decrease loneliness, and enhance self-esteem for elderly seniors living in long-term care as well as provide learning opportunities has been through computer programs/projects designed to teach them how to access the Internet (Danowski & Sacks ,1980; Shapiro,1995 and White et al 1996 as cited in Namazi & McClintic, 2003). I have gathered information on documented Internet access programs to determine how to responsibly proceed with the video conferencing research initiative. My literature review reveals that three Internet access programs have involved frail seniors in long-term care facilities (summarized in detail in Appendix C). These programs are the Seniors in Cyberspace Project, The Connections Project, and the Aase Haugen WebTV Project. The findings of the first two projects were presented at the Association Internationale des University of the Third Age (A.I.U.T.A) 20th Congress, September 2000, in Quebec. The Congress theme was “The Impact of New Technologies on Seniors” (for details see <http://www.ulaval.ca/dgfc/age3/aiuta>). The Connections Project along with its computer guide, volunteer guide, and program-planning guide are fully documented at www.aging.mcgill.ca/connections. Archives from the WebTV project were sent to me from Lynne Monroe, the Aase Haugen Nursing homes’ Development Director. Lynne Monroe and I discussed their project in a lengthy telephone meeting (personal communications June 21, 2003). It is helpful to compare these three projects with Namazi and McClintic’s (2003) qualitative study designed to determine whether computers can be helpful to elderly persons residing in a long-term care facility. Here are some highlights of the findings from all four projects.

2.3.1. Highlights of the Findings

The ability of frail seniors to use computers and which factors facilitate or inhibit their ability to do so is well documented. Contrary to popular stereotypes, the findings in the Connections project along with the Seniors in Cyberspace project suggest that *frail* seniors in long-term care facilities are able to learn the use of computers (i.e. word processing, internet searches, and e-mail) and enjoy doing so, particularly email correspondence. Similarly, M. Sherer (1997 as cited in Namazi and McClintic, 2003) reported, “despite their debilitating health problems, frail elderly residents in a long-term care facility were willing, eager, and able to participate in computer-related activities.” (p.536) Namazi and McClintic’s (2003) study grouped factors that may have hindered elderly participants in their computer program into five categories: physical and cognitive, personal, hardware/software/technological, organizational, and environmental. Examples from these categories that were also noted barriers in the Seniors in Cyberspace and Connections projects include: vision impairments, cognitive and memory deficits, equipment intimidation, and mouse control difficulties due to limited manual dexterity. Subsequently, the researchers from the Connections project recommended WebTV be considered for future programs in this context. Sandra Timmermann (1998) also notes WebTV as a good option for institutionalized frail seniors.

What is WebTV and why is it recommended? WebTV provides streamlined access to the Internet to do searches, and e-mail through the TV (see www.webtv.com for a demonstration). It is deemed less intimidating to use a TV (familiar technology to an elderly population) rather than a computer. WebTV does not require a mouse and has a simplified keyboard with optional enlarged letters, thus the design of the equipment makes accessing the Internet more manageable for elderly persons who may have restricted vision, cognitive and memory deficits and/or limited manual dexterity.

The Aase Haugen Nursing Home WebTV project is an example of program planners providing frail seniors access to the Internet and e-mail using seemingly suitable adaptive equipment. The positive responses to WebTV by the elderly residents in the Aase Haugen Nursing Home’s project is exemplified through the reported 1/3 of the residents out of a total of 139 residents, the

average age of 86, who used/use WebTV to make connections. Although the user-friendly WebTV system is part of the reason for such a high level of resident involvement, it is recognized that volunteer support was/is significant.

Volunteers proved to be an essential part of all the programs/projects. In fact, the design of the Seniors in Cyberspace Computer training program was based upon the premise that the relationship with a volunteer would be key to the learning process. However, getting enough people who could commit for the long term was a common difficulty. The Connections' volunteer guide (see www.aging.mcgill.ca/connections), and programs' volunteer recommendations were carefully considered in the design of my video conferencing study. I adopted the same volunteer relationship premise that volunteers would be key. It resulted in positive outcomes and similar common difficulties with volunteers (see chapter 4 for details and discussion).

The goal for many computer/internet access programs has been for seniors to become independent users, however, for frail seniors in long-term care, this goal has been shown to be unrealistic (Adamson & Cooper, 2000; Chandler 2001; Namazi & McClintic, 2003; Straka & Clark, 2000). But, it is important to emphasize, even though residents may not have become independent users, these programs were successful. Exemplified by the conclusion in the Connections final report, "the outcomes show that it is well worth the effort of implementing and maintaining such a program in terms of the benefits it provides to the participants, as well as the institutions, the teachers, and the volunteers." (Straka & Clark, 2000, p.48) Straka and Clark, also cite studies (Hoot & Haslip, 1983; Kautzmann, 1990; White et al., 1999) that concurred, "where young volunteers were used to provide ongoing support, the intergenerational contact and learning was a positive element for both participants and volunteers" (p.3).

2.3.2. Comments from Elderly Participants, Volunteers, and Staff

The benefits mentioned by *Connections* participants when they were interviewed fell into six categories: feeling a part of society, strengthening social networks, sense of mastery and

increased self-esteem, mental stimulation and challenge, filling a void, joy of learning. (Clark & Straka, 2000)

When volunteers in the *Connections* project were asked what was the most rewarding about their experience, about half the volunteers reported the satisfaction of seeing the participants' pleasure and excitement and watching them progress. For many volunteers their primary satisfaction was getting to know the people with whom they worked:

Meeting the participants every week, the relationship we built over the weeks and the personal enrichment from listening to their unique life stories. (Clark and Straka, 2000b, p.12)

Comments from Lynne Monroe, The Aase Haugen Nursing Homes' development director, also highlight the significance of this kind of social interaction between elderly residents and program volunteers.

Although the original plan was to teach residents to use the WebTV system independently, that wasn't realistic. (Many are nearly blind or have crippling arthritis, which makes it very difficult to type in messages, she said. Others suffer from varying degrees of memory loss.) Even though less than a handful of residents can solo on the system, the program is a success because of the increased contact it has given residents. The volunteers have seen the joy that a message can bring to a resident. They have seen residents embrace new technology. They have seen how even helping a resident to press the 'Send' button allows that resident to assume some control in his or her life."
(IowaLife - Des Moines Register, November 21, 2001, p.8)

When Timmerman (1998) asked early adopters why they went on-line in the first place, the motivational factors that were indicated were "to try something new" and "to make intergenerational connections" (p.69). She notes that "many older adults, particularly those who live more than 50 miles from their families, are willing to try out electronic communication because they are not able to get together face-to-face as frequently as they would like, and they want to be involved in the lives of their children even at a distance." (p.62). Negroponte (1996) speculates that "some people worry about the social divide between the information-rich and the information-poor, the haves and the have-nots, the First and the Third Worlds. But the real cultural divide is going to be generational" (p.70). And he questions to what extent will older

people lose their place in society and will their quality of life decrease because of their exclusion from the digital age.

The story of an Aase Haugen resident who was sent an e-mail photo from a grandson illustrates a way for generations to keep in touch, as well as the impact of a photo on the emotions. Lynne Monroe, the Director at Aase Haugen Nursing Home, told this story to me. She forwarded a written copy of the story as it had been reported in IowaLife The DeMoines Register (Thursday November 8, 2001).

A former resident of the nursing home was nearly blind and suffering from severe depression, so nursing home employees asked a favourite grandson to e-mail her. When his e-mail arrived, they brought the woman down to the WebTV and pulled her up quite close to the 27-inch screen. "He sent a picture and a story," Monroe said. "When his picture came up, she reached out and touched the TV screen, and she was crying. I've missed you," she said. (p.8)

Was the elderly resident crying tears of joy or tears of sadness? What did this WebTV experience mean to this elderly resident? Did the picture and written e-mail message make her feel better? Only she can answer this for certain but her comments were not included in the article. However, Monroe notes, "the WebTV program has become such a big part of the Aase Haugen residents' lives that it has even crept into their funeral services.(i.e mentioned in eulogies as an enjoyable, memorable experience, important to the resident and family members who they communicated with"(p.8). One young grandchild even chose to write a final e-mail, which she read and sent to her grandparent in heaven as part of the funeral service (personal communication).

So connections have been made and positive responds are documented regarding e-mail correspondence with family members in long-term care setting. Yet how significant is the visual. In other words, if a picture is worth a thousand words how much is a face-to-face interaction worth? A photograph is visual, but not the same as visiting in person; looking at a photo while talking on the phone is not the same as a live face-to-face interaction.

2.4. Documented Video Conferencing

Video conferencing is designed to provide users a “live” experience (Vittore, 2005). Who are the users? Long-term care residents have been involved in video conferencing as patients in specialty physician consultation (Wakefield, 2004) but to date, I have not found any documentation regarding the use of video conferencing with residents in long-term care facilities (for family connections nor learning purposes). I have searched education, gerontology, health, and technology journals (peer and non-peer reviewed), as well as websites of long-term care facilities.

A search of the literature reveals video conferencing has been used in a variety of contexts and applications including for business meetings, as a teaching tool in Education, and in the provision of medical services at a distance, as well as in home offices for learning opportunities and connections. For exciting applications in grade school see McCullen (2001) and Cornelli (2004). For University examples, including nursing and medical students, see Furr & Ragsdale (2002) who document the experiences and perceptions of participants in five desktop video conferencing courses at Northwestern State University. For videoconferencing applications in Continuing Health Education for Doctors and Nurses see Whitten et al. (1998) as well as Kaufman and Brock (1998). The only article found in the search on lifelong learning (Havice et al., 2004) titled “Bridging Communities” did not include senior citizens active involvement but focused instead on staff development. The gamut of learning contexts even includes adult prison education (Carlson, 2004) and incarcerated youth (Gilham, 2001) but stops abruptly at seniors learning.

The campus wide University of Saskatchewan’s Web Conferencing Pilot Project 2005-2006 (www.usask.ca, On Campus News, September 24, 2005 and January 20, 2006) uses a program called Elluminate. Using a multimedia-capable computer, an Internet connection, and an optional webcam and microphone, people can attend meetings or lectures from the comfort of their own office or home. People can talk into their microphone or start up their webcam and everyone else in the meeting can hear and see them. (Visit webconf.usask.ca for details.)Limits: four audio and one video feed.

In the United States, Wakefield et al. (2004) conducted a feasibility study, which assessed resident and provider satisfaction and outcomes of specialist physician consultations provided via interactive video to residents of a long-term care centre. A total of 62 residents, 12 physicians, and 30 nurses participated. Data was collected from 76 individual video consultations; none were initial consultations with the specialist. The physicians had already developed a relationship with the patient in face-to-face (in person) consultations prior to this study. Contrary to physicians initial apprehensions that the long-term care residents' perceptions of being on television would be viewed as less personal, intrusive, or as providing a lower quality of care, results from the residents satisfaction survey indicate most residents appreciated being able to avoid a day long trip to see a specialist at a clinic" (p.792) and "Residents felt they were able to communicate with the specialist about their health concerns and were not embarrassed by being seen on a television monitor." 72% were satisfied with the consult format. Wakefield notes patient factors such as hearing and visual deficits and cognitive ability must be considered, as a few subjects had visual or hearing deficits that caused difficulty communicating with the physician but adjustments were made (i.e. a larger monitor was installed and patients positioned closer to the video unit). The findings indicate that it is feasible to deliver specialist physician care to long-term care residents via video conferencing.

Janet Ward's 1999 thesis, *Feminist Pedagogy in Techno-Space: Experiences with Compressed Video Conferencing*, which reports the experience of learning in techno-space (a technology-mediated classroom) from the perspectives of female university students, provides valuable insight even though participants were not long-term care residents. Findings indicate that it was possible to create a safe environment and sustain an interactive learning community using video conferencing by adhering to principles of feminist epistemology and feminist pedagogy. I highlight this University of Saskatchewan thesis because key components of feminist pedagogy - dialogue and reflecting on personal experience - are also key components to optimizing the learning community for seniors (Jarvis 2001; Mackeracher 1998). And a comfortable interactive environment is also key to an enlivened nursing home environment for residents, a goal within cultural change initiatives in long-term care (Martin 1999; Kane 1995; Thomas 1996 and 2003).

HM Health Matters, a magazine put out by the Saskatchewan Association of Health Organizations, recently published an article on the use of video conferencing within this province. Titled *Making the Connection*, Dowler (2005) writes:

“Through video conferencing technology doctors treat patients thousands of miles away. The Saskatchewan Telehealth system is designed to be used for patient care as well as distance training. However, “patients always come first,” says Mary Deren, Telehealth Coordinator for the Weyburn General Hospital.” (p.50)

“By the end of 2005, 26 sites are to be in operation across the province with Telehealth available in every provincial, regional, district and northern hospital.” (p.50, Dowler, 2005)

To have video conferencing like this available is a great achievement for the province of Saskatchewan, a wonderful medical service for patients, and a means of medical training and distance learning in a formal context. Evidently the technology exists. However, in many ways it is not *making the connection* with long-term care residents formally or informally (from a lifelong learning perspective). Note: in rural Saskatchewan the nursing home is often close to if not in the same facility as the hospital. If the equipment can be used for training/continuing education then why not further learning of the residents as well as the staff? Recall quality of life of long-term care residents is more than medical treatment and learning is health related.

2.5. How is the Interactions Face-to-Face Initiative Different?

Given major advances in technology, a variety of technological applications are rapidly being implemented in long-term care that are intended to make the work of nursing homes more efficient (i.e. Community Net). But as York (2005) points out the group of persons that seem left out of the equation is “the person whose life the industry is supposed to be trying to improve to sustain, to grow- the person who actually calls the nursing home his or her home.” (p.45) Interactions Face-to-Face initiative, specifically embraces video conferencing technology with long-term care residents and their family. I view it as an intergenerational lifelong learning strategy with an emphasis on learning in later life. The presumed meaningful social interaction encountered through the video conference experience is anticipated to advance lifelong learning,

which is about continuing to learn throughout life from cradle to grave, and is by definition “about the conscious and continuous enhancement of quality of life, one’s own and that of society” (Dave, 1967). It is for residents in long-term care who may be isolated, lonely, and bored, and who could benefit (i.e. mentally, physically, socially) from the face-to-face connections made via Internet access, and who should be given the *option* to use modern technology to connect and learn. This initiative is also for the family and friends who could benefit from interactions with their loved one living in long-term care. Volunteers available to provide technical support are an integral part of the process. Conducted in a designated long-term care home in Saskatchewan, this video conferencing study is the first of its kind to be documented in this context.

Given the success of other Internet access/computer programs involving frail elderly in long-term care (i.e. the Connections project, Seniors in Cyberspace project, and the Aase Haugen WebTV project), and e-mail correspondence with family as a significant reason for their persistence in those programs, suggests that some elderly residents in long-term care homes will embrace video conferencing technology as a means to connect with family.

How is this video conferencing study “Interactions Face-to-Face” different from the internet access and computer programs discussed earlier in this chapter? The majority of documented computer programs involving elderly long-term care facilities have focused on teaching the required computer skills for independent use, which demand literacy skills. As well, the interactions via written communications have mostly been asynchronous meaning not in real-time (i.e. e-mail). Video conferencing, on the other hand, focuses on spoken and non-verbal communication in real-time. Rather than independent use the focus of this study is the video conferencing experience itself and queries the provision of service for residents to connect with family. Its base and structured use of volunteers is relational. The chosen video conferencing equipment used for this study does not use a computer. A comparison is given in Table 1.

The chosen equipment for this study is called i2eye DVC-1000. To install connect highspeed internet to it then Plug it into the television and it is ready for video conferencing. (See Appendix A for photo of equipment and what appears on the television screen) Case studies of video

conferencing using the i2eye, posted on the manufacturer’s website (see www.dlink.com), show grandparents visiting with grandchildren but do not include any case studies in a long-term care home environment. Thus participants of the Interactions Face-to-Face study are pioneers, breaking new ground.

Table 1: Focus of Previous Computer Programs versus Interactions Face-to-Face

<u>Computer Programs Focus</u>	<u>Interactions Face-to-Face</u>
Independence	→ interaction (increase meaningful social interaction)
E-mail correspondence	→ face-to-face conversation (video conferencing)
Reading & writing	→ listening & speaking hearing & seeing another person
Teaching&learning computer skills	→ experiencing video conferencing and learning in the social context
Computer with internet	→ TV with Highspeed internet

CHAPTER 3 - INSTITUTIONS; NURSING HOMES; HOME-LIKE?

This chapter presents an overview of concerns about the traditional nursing home environments by focusing on specific problems of loneliness, helplessness, boredom and it provides a brief description of the Eden Alternative as a “culture change initiative” intended to address quality of life and transform institutional long-term care settings into enlivened environments that are more like home.

3.1. Common Problems with Nursing Homes / Institutions

Health problems bring individuals to nursing homes but upon admission the environmental changes are immediate and glaringly obvious. The places are a long ways from home. The most common complaints about nursing homes involve problems common to institutionalized living: lack of privacy, limited personal possessions, loss of control over routines, impersonal treatment by the staff. Add to these the constant presence of death, pain and loss, loss of activities, loss of mobility, loss of companionship. They all are perceived as negatives that create serious obstacles for the resident, family, and staff. (Hajjar, 1998; Kane, 1995; Kane & West, 2005; Martin, 1999; Thomas, 1996; Williams , 1990)

In *The Nursing Home Decision: Easing the Transition for Everyone*, a book written to help family and friends of the prospective or new nursing home resident, Lawrence Martin, M.D. describes a common image of a nursing home as a “warehouse for the elderly”. He explains, “Many people associate nursing homes with old age, failing physical and mental strength, and death. Nursing homes have not been places to look toward with anticipation for potential residents or the people close to them.” (p.21) We all are potential residents.

As a way to explain how nursing homes present challenges for residents and family and as a guide to ease the transition, Martin discusses the four basic emotional needs we all have according to Maslow and emphasizes we pursue them in the order they are listed:

- (1) Safety and security: Without this it is difficult to work, relate comfortably with others, or play. “A home that feels familiar is important, we seek the sense of belonging, familiarity and ownership that home means.” (p.34) Relationships we can count on also contribute to feeling safe.
- (2) Feel loved and to love: Confirms our sense of worth and uniqueness, makes the trials, disappointments and humdrum routine of our lives tolerable, reassures us that we value others and have something important to give.
- (3) Sense of power, control, or autonomy: “Our ability to make everyday decisions - what to wear, when and what to eat, what to read or watch on television, when to go to bed - contributes mightily to our sense of control.” (p.37)
- (4) Privacy: Confirms our uniqueness and our competence. As much as most of us need both casual and meaningful contact with others, we also need times, places, thoughts and functions that are ours alone.

From professional and personal experience, Kane and West (2005) warn other families that: (1) Even good nursing homes are institutions which operate according to fixed rules and are very careful to stay within the accepted regulations; (2) Few nursing homes are places to live; some are places only to die. Almost none provides a life-style that anyone would seek out. (p.115)

Although there was a call in the 1970s for nursing home residents to live more normal lives, based on nursing home research that indicated widespread problems of idleness which lead to loneliness, boredom, and negative self-esteem (Gottesman & Bourestom, 1974), traditional nursing home residents continue to spend their lives chained to an inhumane daily routine (Harper Ice, 2002). Although their “medical” care plans may differ, all nursing home residents are treated alike within the limitations of institutional constraints that shape daily life patterns. Although the activities that make up the residents’ scheduled day are “dedicated to providing

compassionate, comprehensive treatment”, as Thomas (1996) notes, institutional regimes impose a characteristically uniform way of life on all residents, regardless of their wishes.

In the article “Long-Term Care and the Human Spirit” Williams (1990) quotes nursing home residents’ examples of times they felt their spirit was broken.

Resident 1: “When I was told I didn’t need the bedpan because I used it only an hour ago, I was left to have the bowel movement in my bed. That broke my spirit.”

Resident 2: “May I please take my rest now? A friend came to visit me during my usual nap time.” Nurse’s assistant: “No, everybody has to be up before the 3 o’clock shift comes on.”

Resident 3: “That paper taped to my mirror is the schedule for when I’ll be taken to the bathroom.” Social worker: “Did you help plan it?” Resident: “No, they brought it to me.” (pp. 2-3)

Where nursing homes are task-centred rather than person-centred, such controlling behaviour contributes to the suffering of the elderly/long-term care residents. Williams (1990) calls for culture change in nursing homes. “Person-centred, individualized care is urgently needed if those who live and work in our long-term-care institutions, as well as families and friends who visit, are all to be sustained and nurtured in both body and spirit.” (p.25)

Task-oriented systems depersonalize both residents and staff (Gass, 2005); and the prevailing system is based on the acute-care hospital model (medical model), which is unsuited to the long stays typical in nursing homes, where the resident’s quality of life is deeply affected by both the social and physical environments. (Williams, 1990; Thomas, 1997; Kane, 1995) While Williams (1990) and Chuck, Milke, and Beck (2005) acknowledge positive change regarding the personalization of individual rooms, public spaces are still institutional in appearance and older people often have strong responses as they attempt to cope with the depersonalized social and physical environments they find in most nursing homes. “Some resist, demand and complain, others strike out physically and verbally, while others withdraw in depression” (Williams 1990, p.4).

3.2. Learned Helplessness

Learned helplessness in nursing homes is associated with depression and poor health for residents (Kane, 1995). Learned helplessness refers to the phenomenon of residents learning to be passive and dependent through repeated behaviour and situations in institutional settings over which they have no control. Owing to residents' physical and/or mental disabilities, staffs constantly help. However, this help is problematic when decisions are made for residents rather than in consultation with them.

Rosalie A. Kane cites numerous studies from the late 1970's and notes her own work through the 1990's showed that "cognitively intact residents gave high priority to their wish to control access to the outside world, such as the telephone and trips away from the home, and that they also tended to be dissatisfied with the control they could exercise over the timing and conduct of ordinary events such as getting up, going to bed, eating, and bathing." (1995, p.64) Kane and West (2005) observe how much time and careful consideration their mother used to spend on appearances, how she loved to select and coordinate her clothes and was even a hat model. From her dishevelled mismatched appearance when Robert saw her in the nursing home, it was evident she had not picked out her attire, and the time allotted to get her up and dressed in the morning was nowhere near the time she used to devote to her appearance and self care. Instrumental passivity suggests that residents' passive behaviour results from discouragement of independence by staff (Harper Ice, 2002); regardless of well-meaning staff, the structure of the institution, a task-based system, ensures these negative outcomes.

Barder, Slimmer, and LeSage (1994) confirm that elderly people in long-term care settings are more vulnerable to experiencing learned helplessness (a perceived loss of control) and depression than elderly people in acute or rehabilitation settings. The theoretical model most widely utilized to explain institutionalized elderly people's passive, dependent behaviours and subsequent depression is the learned helplessness theory. This theory claims that "a condition of helplessness develops when individuals experience uncontrollable life events, believe that they can do nothing to change the outcome of these events and develop the inappropriate expectations that outcomes of future events will also be beyond their control" (p.597). The authors also claim

the institutional environment and nurses themselves can contribute to dependent behaviours in elderly people (i.e. the use, manoeuvring, and manipulation of wheelchairs).

In the Eden Alternative training manual, helplessness is defined as the pain we feel when we always receive care and never give care or never have the opportunity to give care. For example, to alleviate helplessness Eden advocates taking care of plants and pets that are co-habitants/companion pets. Being needed is reason to live. This being needed relates to Maslow's second and third emotional needs, which Martin writes about (to feel loved and to love, sense of power, autonomy).

3.3. Loneliness

Old age, particularly late old age, is often seen as a stage of life characterized by loneliness (Jylha, 2004). What is loneliness? Sister Teresa said loneliness is the worst poverty. Vanier (1998) refers to loneliness as "a taste of death" and claims it most often shows itself in the elderly as a source of depression. Loneliness is not synonymous with isolation or solitude although they all relate to aloneness. Loneliness is subjective whereas social isolation is a more objective concept, based on the quantifiable absence of contact with others (Wenger & Burholt, 2004). Social isolation is to some people a welcome positive experience whereas loneliness is the experience of negative feelings about missing relationships. Thus loneliness may be described as negatively perceived social isolation. Solitude is aloneness that has a peaceful calm quiet connotation, a chosen private space. Some long-term care residents crave solitude.

The Canadian Journal on Aging devoted an entire 2004 issue to the topic of loneliness and social isolation. Loneliness was largely ignored in social sciences until the 1970's and only now is loneliness in old age gaining attention due in part to an aging population and rising healthcare costs. Weiss (1973) is a classic, widely used today. He differentiates between emotional and social loneliness. Emotional loneliness is lack of a specific, intimate relationship (e.g. a best friend, a spouse), lack of a reliable attachment figure, characterized by feelings of emptiness, forlornness, desolation, anxiety and insecurity (Dystra & de Jong Gierveld, 2004) and sometimes is related to depression (de Jong Gierveld & Haven, 2004). Social loneliness is the lack of social

integration and embeddedness, the absence of a broad network of friends and others. Social loneliness is characterized by feelings of aimlessness, boredom, and exclusion. The opposite of loneliness is belonging (de Jong Gierveld & Haven, 2004; Vanier, 1998) and/or companionship (Thomas, 1996).

Loneliness is associated with a variety of problems including poor mental and physical health, memory deficits, and sleep disturbances (Perlman, 2004). Likewise, Haven et al. (2004) and Murphy (2006) claim many studies show a negative association between health and loneliness. Both cite Forbes (1996) who suggests that people suffering from disabilities, mobility restrictions, or chronic conditions are most likely to feel lonely.

Loneliness among seniors is associated with entering a nursing home/institution (Russel et al. 1997, cited by Perlman 2004, p.181). While Russel et al. (1997) tests the relationship between loneliness and subsequent admission to a nursing home his study does not address the prevalence of loneliness after admission. Haven, Hall, Sylvestre, and Jivan (2004) indicate social isolation and loneliness may result as a consequence of the reduction in social contact following residential relocation. From cross-sectional and longitudinal analyses examining the association of age with loneliness in a representative population sample, aged 60 and over in Finland, Jylha (2004) found that loneliness does increase with age, not because of age per se, but because of increasing disability and decreasing social integration, negative life changes that are often associated with older age, and major life changes such as institutionalization. Loneliness was most frequent among individuals in institutions (Jylha, 2004).

Given the subjective nature of loneliness, Perlman (2004) explains that individuals surrounded by others can feel lonely “if they have unusually high levels of desired social contact or if the people around them fail in offering key relational provisions, such as attachment, reliable alliance, and reassurance of worth” (p.184). Hence, the impersonal nature of nursing homes, contributes to loneliness. Staff are not encouraged to develop relationships with residents (Williams, 1990; Gass, 2004); high staff turnover rates and rotating staff make it difficult to develop and retain a trusting relationship with staff (Gass, 2004; Thomas, 1996); and “nurses are often so harried and hurried that they do not or cannot take the time to assuage loneliness”

(Murphy, 2006, p.3). Residents of nursing homes not only face physical deterioration but also loss of independence, privacy, and familiar environment factors which lead to high levels of loneliness and depression and a low perceived quality of life (Nijs, 2006).

Suthers-McCabe (2001) claims companion animals offer one of the most accessible enhancements to a person's quality of life, decreasing loneliness, increasing happiness, and improving physical functioning and emotional health. She observes that companionship is the most frequently cited benefit of older pet owners. However standard policy and practice in long-term care facilities is to prohibit pets. Suthers-McCabe discusses the pain elderly pet owners experience having to give up a pet when relocating to a long-term care facility. When elders enter residential care, "they frequently are required to part with a beloved pet, perhaps losing contact with it permanently" (p.94).

Relationships are important, a sense of belonging key to alleviating loneliness. In *Becoming Human*, Vanier (1998) also states to be lonely is to feel unwanted and unloved and therefore unlovable (p.10). He describes loneliness as a feeling of not being part of anything, of being cut off. It is a feeling of being unworthy, of not being able to cope in the face of a universe that seems to work against us (p.33). Vanier talks about the terrible feeling of chaos that comes from extreme loneliness. Likewise, Jylha emphasizes loneliness is not a mechanical consequence of the absence of other people; rather, loneliness is, or derives from, an awareness of the existence of **human community** and other people, and it is this awareness that makes loneliness such a painful experience (Jylha, 1990, p.297).

What about family? Wenger and Burholt (2004) define the concept of loneliness as "a subjective measure of unwelcome feelings or perceptions on the part of the respondent, associated with a lack of contact with others or with *a particular other*, as a result, for example, of bereavement or *geographical separation*. It is associated with an unsatisfactory level of *communication and closeness* with others." (p.116, italics added) Hagestad's keynote address to the United Nations (1998) underlined "[T]he importance of communication within the family and maintaining continuity across life phases to strengthen the social embeddedness of young, as well as older,

family members; where this is done, the risk of intense loneliness may be alleviated.” (cited by de Jong Gierveld & Haven, 2004, p.111)

Both independently living and institutionalized older adults were included in the Dykstra and de Jong Gierveld (2004) study that found linkages between parenthood and loneliness among women. “Women who saw one or more of their children on at least a weekly basis were less socially and less emotionally lonely than women who did not interact with their children that often” (p.153).

3.4. Boredom

Activities are thought to be an important component of quality of life, keeping residents active and socially involved, they are believed to help residents overcome loneliness, learned helplessness, and instrumental passivity (Harper Ice, 2002; Kane, 1995). Activity programming has significantly improved and expanded over the past 20 years in long-term care facilities. Harper Ice (2002) cites numerous studies that demonstrate the positive effects of such “therapies” including improved self-esteem, mental health, and quality of life (p.347). Thomas (1996) and Slama and Bergman-Evans (2000) indicate that regardless of the improved “therapies” in the past two decades, isolation and idleness are problems that persist in present day nursing homes. They explain, the loneliness of being cut off from the wider society and being left to one’s own thoughts for long periods of time, not acknowledged as being capable of growth nor able to make decisions and not given opportunities to help or feel useful continue to breed negative self-esteem and boredom.

What is boredom? Dullness, monotony, tediousness. The dictionary of Canadian English defines boredom as a bored condition; weariness caused by dull, tiresome people or events. The distinction needs to be made that people who say they are bored are not necessarily saying that the people around them are boring, as may be insinuated by this definition, but rather a more accurate assessment is that they do not perceive themselves to have much in common (besides perhaps the fact they are forced co-habitants or roommates in the nursing home). They have different interests. My personal experience with elderly people and long-term care residents is

that they are not boring, on the contrary, conversations and interactions, time together, have revealed very colourful individuals.

The “one-size fits all” social environment found in institutions/traditional nursing homes (R. Kane, 1995) perhaps contributes to individual resident’s boredom. Large events and activities that involve a large number of residents and staff are commonly planned in long-term care facilities. Such globe events within the facility do serve to create a sense of community and are opportunities to celebrate common traditions and holidays, which may be very enjoyable for those who choose to attend. However, the size of such events would seem to stifle the ability to create intimate, meaningful interactions. Moshe-Ashley and Lemay (2001) recommend greater emphasis be placed on smaller activities that encourage greater rapport among residents, as well as between residents and staff members.” (p.53) Rosalie Kane (1995) and Thomas (1996) agree.

Within the Eden Alternative (Thomas, 1996) the first principle identifies boredom as one of the three plagues, which account for the bulk of suffering among long-term care residents. Thus, boredom is recognized as a serious problem. The Eden training manual defines boredom, as the pain one feels when one’s life lacks variety and spontaneity. The task-based, routinized daily schedules, typical of traditionally run nursing homes also contribute to the monotony. A hospital-like sterile physical environment is not comforting or mentally stimulating. Consequently, the Eden alternative advocates enlivening the environment with the use of various live plants, companion pets, and close contact with young children, which offer opportunities for stimulating, spontaneous interaction.

A consequence of boredom is agitation in nursing home residents. Thomas (1996) notes,

“residents who bang, pound, yell, and resist care are often just doing what they can to break free of suffocating boredom and isolation. Staff misunderstand this behaviour and often medication is given to blunt the patients lack of cooperation” (p.48).

The residents’ cry for help requires attention that is related to their health and well being but not necessarily appropriately treated with medication when the provision of such medication results in residents being more inactive and more dependent on staff for help. Medication addresses the

behaviour but does not resolve the problem. Thus, the call for nursing home residents to live more normal lives still needs to be answered. For the elderly in nursing homes to have more positive learning experiences, researchers and practitioners need to address their physical isolation and the social interaction component of living and learning.

Examining time use by frail older people in different care settings including nursing home, assisted living facility, and at home, Pruchno and Rose (2002) found the most frequent activities were watching television and resting. They found that nursing home residents spend more time doing recreational activities and less time watching television than did respondents living in their own homes. From a one-year ethnography case study of television in the nursing home, Hajjar (1998) concluded watching television is the most prevalent and pervasive activity for long-term care residents. She acknowledges that within gerontological literature, high television use is widely assumed to be problematic, “portrayed as an activity of last resort, a time filler, or a poor use of resources,” (p.140) but based on her findings she recommends recognition be given to the beneficial dimensions of media consumption, pointing out that “media use textures the communication environment, stimulates conversation, delivers information and entertainment options.” (p.140) She draws particular attention to television’s ability to encourage external continuity and the simple pleasure derived from its use. Such considerations suggest television can also alleviate boredom and contribute to the quality of nursing home life.

As was already mentioned in chapter two, a growing body of literature suggest the use of computers and the Internet may enrich the institutional living environment and enhance long-term care residents quality of life (Chaffin & Harlow, 2005; Namazi & McClintic, 2003; Tak & Beck, 2007; York, 2003) Learning activities about distance communications (i.e. learning about computers and using e-mail) have been well received by frail elderly long-term care residents.

3.5. Cultural Change Initiatives

Before looking at implementing strategies for positive change in long-term care, a quick summary of what has been learned so far. The previous sections have discussed literature that indicates loneliness, learned helplessness, and boredom are prevalent in institutions/traditional nursing homes and are associated with low perceived quality of life. As well, all three are

documented to be associated with depression. Depression is a serious problem, particularly for those who suffer from chronic diseases and disabilities (Cusack, 2003). Depression is a mental health issue the details of which are beyond the scope of this study. However, particularly relevant to the efforts of this video conferencing study, Jarvis (2001) asserts there is evidence to suggest that the incidence of depression is high in residential care and cites Murphy (1993) to point out,

a period of depression is one in which old people often lose friendships and family contact because of the nature of their illness. This merely exacerbates their condition. It is a time when the depressed need to know that they are valued persons but it is often one in which they are denied opportunity to reminisce and to relate to others. (Jarvis 2001, p.134)

Nursing and medical students who have spent time in nursing homes have referred to the nursing home as a depressive environment. From the 793 students interviewed in the Happel (2002) study, few students after graduation choose to work in nursing homes. A factor deterring them from choosing nursing homes was not working with elders, but the depressive environment of nursing homes. (as cited in Rosher & Robinson, 2005, p.275) The overall feeling was nursing homes are large institutions viewed as places where no one would choose to go. However views changed when students spent time in an Eden Alternative home.

Positive studies about nursing homes (Rosher & Robinson, 2005; Drew, 2005) are just now beginning to emerge in the literature. They reflect the implementation of “cultural change initiatives”. This refers to institutions/nursing homes that have made significant efforts to transform the lives of residents: improving the care, increasing the choices they have over their daily lives, and focusing more on the quality of life aspects of the nursing home life. (Gaugler, 2005) The Eden Alternative is one example of a cultural change initiative.

According to proponents for improved quality of life within long-term care settings, nursing homes should be: less sterile and institutional, more home-like and community focused, person centred not task-based systems.

Like other advocates for serious change in long-term care (Kane, 1995, 2001;Thomas, 1996) Williams (1990) push for “**the practice of individualized care**”, which is “grounded in knowledge of the person’s life history, personality, pattern of daily living, and tastes and preferences and in the concern for the comfort of the person in the nursing home setting.” (p.4) It promotes a sense of continuity in residents’ lives, communicating respect as individuals. To exemplify how care plans have evolved, York (2005), as well as Elm and Johnson (2000), discuss innovative computer technology used to consolidate information gathered from numerous staff about residents and maintain residents’ individualized care plans for staff (care team) to refer to. Information about the residents’ tastes and preferences are written in first person rather than third, an effort to personalize. Photographs may even be included. Yet, how often are care plans reviewed with residents, information updated, and/or history and preferences acknowledged through staff actions?

Suggested strategies for dealing with the problems in long-term care include:

- (1) increasing the quality of existing relationships, and
- (2) involving lonely older adults in activities wherein they may develop the types of relationships that they desire with others (p.185, Perlman, 2004 cites Russell et al., 1997)
- (3) personal access to a telephone (Wenger and Burholt, 2004)
- (4) Eden Alternative promotes/supports companionship (pet, children). In the Eden Alternative training manual loneliness is defined as “the pain we feel when we want but do not or cannot have companionship” (p.7)
- (5) Murphy (2006) highlights lifelong learning as a way of reducing loneliness (note: informal learning, p.4).

3.6. Eden Alternative as a Gerontological Model for Lifelong Learning

After a few years of working as a medical doctor in a nursing home in the early 1990’s Dr. William H. Thomas, a Harvard graduate, noted that the majority of the elderly he was treating with medicine were not getting better. Based on his observations he felt that they were really suffering from non-medical ailments: loneliness, helplessness, and boredom. In 1996, Dr. William H. Thomas and his wife Judy Thomas, a gerontologist, put forward the Eden AlternativeTM, now an internationally recognized fundamental movement away from the medical model of treatment in long-term care facilities to a home-like, community model of care. It has

been implemented in nursing homes across Canada including some long-term care facilities in Saskatchewan. The Eden Alternative provides a practical example of how life long learning can be provided for frail elderly persons and a supportive place for a study of persons in long-term care.

In Eden homes, staff is encouraged to view the nursing home as the elder's "home" where elders have choices regarding meals, bathing, time to get up and go to bed. Employees become members of neighbourhoods along with the elders. Eden homes are focused on building community with a particular emphasis on maintaining intergenerational contact (i.e. on-site daycare for preschool children, intergenerational programs with neighbouring schools, and volunteers of all ages). Within the Eden Alternative philosophy, companionship, the ability to give as well as receive care, and an element of spontaneity in day-to-day life, are key to alleviating residents suffering. Providing on-going contact with children, plants, and animals are the basics of the Eden environment referred to in the principles as "creating a human habituate."

The core concept of the Eden Alternative, is committed to creating better social and physical environments for people:

*We must teach ourselves to see long-term care as **habitats for human beings** rather than institutions for the frail and elderly. We must learn what Mother Nature has to teach us about the creation of vibrant vigorous habitats.*

(Thomas, 1996)

Thus, the Eden Alternate aims to transform long-term care institutions for the frail elderly into liveable habitats that include close and continuing contact with pets, plants, and children. Companion resident animals, opportunities to care for living things, and the variety and spontaneity of children contribute to an enlivened setting. (Thomas,1996,1999, 2003) The Eden Alternative seeks to eliminate the three plagues of institutions. Giving residents an opportunity to give care as well as receive, it is the antidote to the first plague, helplessness. Easy access to human and animal companionship is the antidote to loneliness. "Research has provided evidence that humans, especially older people, consider their companion animals, or pets, to be members of the family... Companion animals offer one of the most accessible enhancements to a person's quality of life, increasing happiness, decreasing loneliness, and improving physical functioning

and emotional health.” (Suthers-McCabe ,2001, p.93) Pets especially dogs seem to help their owners in times of loss (p.93). The antidote to boredom is variety and spontaneity. Having choices is key to quality of life, a circumstance that is lost in a total institution. Suellen Beatty, one of the two Western Canada Regional Eden Associate Trainers, describes the new philosophical approach as “one of the most powerful tools for changing the quality of life for people who live in long-term care.” She stresses that the Eden Alternative is not a program: it is an “organizational cultural change” (Eden Associate Training, May 2003). The Eden *Mission*, *Vision*, and *Values* are summarized in Table 2. The *Ten Principles of the Eden Alternative*, which are used to guide the transformation to an Elder-centred community are listed in Table 3.

In a 2002 Public Broadcasting Service *NewsHour* interview, Dr. William Thomas, the Eden Alternative founder, notes the vision of Eden long-term care homes being “smart homes, which will have e-mail and video conferencing capabilities.” (http://www.pbs.org/newshour/bb/health/jan-june02/eden_2-27.html). Thomas (1999) also states, “in this day and age we must use every means available to use to create and promote *dohavkee* connectedness in this world” (p.227). The research site chosen for Interactions Face-to-Face video conferencing study is a designated Eden Alternative long-term care home.

The Eden Alternative offers opportunities for the learning of the frail elderly in institutional care. Howard McClusky the American forefather of educational gerontology makes the case for viewing the learning needs of the elderly and many elderly are located in institutions of long-term care. (Hiemstra, 2002, p.19)

The gerontological movement is geared pretty much to the protection of older people and the production of a floor of support, so that older people can live in dignity and self-respect and as independent as possible. This is as it should be. But the educational approach is a little different. As educators, we assume that the client is capable of improvement. (McClusky, 1976b, p.118)

So, what I am saying is that if we approach the field of gerontology from an educational standpoint, we constantly see evidence of the fact that older people are learning and can renew their faith in their ability to learn. (McClusky, 1976b, p.119)

Table 2: Eden Alternative Mission, Vision, and Values

- **Mission:** To improve the well-being of Elders* and those who care for them by transforming the communities in which they live and work.
- **Vision:** To eliminate loneliness, helplessness, and boredom.
- **Values:** The Eden Alternative Ten Principles

* The founders of Eden Alternative chose to use the word Elder as it is used in traditional cultures. The wisdom of Elders is revered and Elders are honoured and cherished. They define Elder as someone who by virtue of life experience, is here to teach us. With this definition even someone who is not chronologically elderly can be an Elder.

(from Eden Associate Training Manual)

My focus in the field of gerontology is on learning in later life. The learning of seniors' is part of their continuum of lifelong learning, "cradle to grave". I am a firm supporter of lifelong learning as it was originally presented to UNESCO as a push to promote and support continuous learning throughout life. This covers formal, informal, and non-formal patterns of learning. It is about "the conscious and continuous enhancement of quality of life, one's own and that of society" (Dave, 1976). Thus lifelong learning is a basic concept and a social goal.

In 1989, Peter Laslett, the British forefather of the University of the Third Age (U3A), wrote *A Fresh Map of Life: The Emergence of the Third Age*. He identified four ages in the human life span as: First an initial period of preparation for adult life marked by dependency, socialization and schooling; Second a period of being in the work force, home-making, entering into conjugal relationships and childrearing; The Third Age is when a person leaves the workforce, ceases many domestic and family responsibilities and becomes free to satisfy personal ambitions and needs; And the fourth age is one of dependence and decrepitude leading to death.

Table 3: The Ten Eden Alternative Principles

- 1. The three plagues of loneliness, helplessness and boredom account for the bulk of suffering among our Elders.**
- 2. An Elder-centered community commits to creating a Human Habitat where life revolves around close and continuing contact with plants, animals and children. It is these relationships that provide the young and old alike with a pathway to a life worth living.**
- 3. Loving companionship is the antidote to loneliness. Elders deserve easy access to human and animal companionship.**
- 4. An Elder-centered community creates opportunity to give as well as receive care. This is the antidote to helplessness.**
- 5. An Elder-centered community imbues daily life with variety and spontaneity by creating an environment in which unexpected and unpredictable interactions and happenings can take place. This is the antidote to boredom.**
- 6. Meaningless activity corrodes the human spirit. The opportunity to do things that we find meaningful is essential to human health.**
- 7. Medical treatment should be the servant of genuine human caring, never its master.**
- 8. An Elder-centered community honors its Elders by de-emphasizing top-down bureaucratic authority, seeking instead to place the maximum possible decision-making authority into the hands of the Elders or into the hands of those closest to them.**
- 9. Creating an Elder-centered community is a never-ending process. Human growth must never be separated from human life.**
- 10. Wise leadership is the lifeblood of any struggle against the three plagues. For it, there can be no substitute.**

(from www.edenalt.com)

Jarvis (2001) presents old age as a time of opportunity and development rather than a period of obsolescence and decline. This *New Age of growing old*, the emergence of the fourth age (Jarvis, 2001; Soulsby, 2000; Swindell, 2002) is the focus of my thesis. Most current academic research in educational gerontology, however, focuses on the third age (approximately 50 to 74 years old). Jarvis suggests this might be related to the fact that society has needed to adjust to having a large physically and mentally active retired population for the first time. Hence, university initiatives to provide “Third Age” vocational programming (U3A) have emerged internationally, including U3A Online (Swindell, 2002). Because of limited research, the fourth age (after 75) is a period of life in which little is known about peoples’ learning. Jarvis (2001) emphasizes that *until recently*, many have just been cared for physically, with little reference to their mental activities. It was the best form of caring that we knew *in the past*: people were safe, had somewhere to live, were fed and looked after (Jarvis 2001, p.127, italics added). The commonplace image described by Jarvis of the elderly just sitting around in wheelchairs positioned around the walls of large rooms in nursing homes, doing nothing and being left to their own thoughts, is also the haunting image I have of the institution where my Grandma was confined.

To optimize the learning community for senior learners, therefore Mackeracher (1998) reminds adult educators/educational gerontologists, programmers and funders of the need to design programs using an integrative view of learning. Content, whatever the subject matter is, should be relevant to seniors’ current and future needs and interests. The notion of relationship refers to both the need to use past experience as a resource for current learning and the need to learn in relationships with others. Responsibility means seniors need to have some responsibility or input into the planning and implementation of programs. It is from this principle that I see the value of providing communication technology to re-integrate residents with family and friends who are so often the most valued parts of their lives, and directly involve residents in an initial exploration of video conferencing in a long-term care context.

The Eden Alternative premise is that each person grows because of interaction, companionship and reciprocal caring, which is parallel to Jarvis’s (2001) model of learning that situates learning

within in the social context, thus learning is an interactive phenomenon. In his view learning is about living and is continuous throughout life. In his book *Learning in Later Life* he explains that

“learning is the process whereby human beings create and transform experiences into knowledge, skills, attitudes, beliefs, values, senses, and emotions. It is at the very heart of our humanity.... The change in focus is from learning something to people learning by constructing and transforming their own experiences of everyday living” (p.10)

I am mindful of the heavy workload of care staff in nursing homes that are understaffed and filled to capacity. I am equally aware of family members who do not live in close proximity, who may not be the “primary” family caregiver but want to maintain contact and be involved with their loved ones living in long-term care.

The knowledge gained in this experiential study may contribute insight to culture change initiatives as some have focused on relationship building between resident and staff but none of these initiatives, including Eden Alternative, have made resident-family relationships central features of its reforms. (Gaugler, 2005)

CHAPTER 4 - MERGING COMMUNITY RESEARCH WITH COMMUNITY SERVICE: A RELATIONAL MODEL OF RESEARCH

Learning is essential to all of us who must adapt and transform to the new challenges of life, for instance longevity, decreased healthcare funding, family mobility, information age, and isolation (Jarvis, 2001; Swindle, 2002). Timmerman (1998) addressed the role of Information Technology in older adult learning to meet the challenges of older adulthood. At the dawn of a new age of growing old, she wrote:

Two trends are converging as we reach the year 2000: the increase in the number of older people and the growth of the information technology industry. Understanding how older learners can take advantage of the technological revolution for learning, and providing them with access to computers, the Internet and other technologies will be one of the greatest challenges and opportunities for older adult educators in the next few years. (p. 61)

Research conducted with seniors, including frail seniors in long-term care, provides evidence that computer programs for seniors are beneficial. *Access to e-mail and the Internet* provide opportunities to strengthen social networks, to increase self-esteem, to mentally stimulate and challenge, and to learn as well as grow (Straka & Clark 2000). Practically speaking, however, not enough support is in place for this type of seniors learning, specifically for elderly people living in long-term care homes. Timmerman (1998) explains,

Educational programs to teach people who live in **institutional settings** such as continuing care retirement communities, assisted living facilities, and nursing homes **to use computers** - particularly to **go online** - have been **successfully initiated**. Obtaining computer equipment is often the stumbling block for those in charge of programs and activities. And some professionals in these institutions do not have a vision of the positive effects that Internet access in particular might have on their residents.” (p.64, bold mine)

This situation needs to change. Not only do elderly people have the right to learn and to use modern technology, but also the learning and connections made possible via access to the Internet are associated with improved quality of life.

A new age of growing old requires a new world of research and academic work: the merger of community research with community service. It is a relational model of research: action research. This chapter zooms in on the details of the methodology used for this qualitative study including: a review of the research design, a rationale for the collaborative approach used, and the researcher's context, the research site, and the recruitment and involvement of participants. The chapter proceeds with an examination of the methods of data collection, which include observation, journals, interviews, and a volunteer survey and concludes with an examination of issues relating to ethics and representation.

The most difficult and critical point to this study was providing the service, not only the technical equipment but also technical support during each video conference. The first section of this chapter discusses the rationale for the chosen equipment, and challenges to initial setup.

4.1. Technical Setup: i2eye, Highspeed Internet Access, and a TV

The i2eye, DVC-1000 videophone, manufactured by D-link, is the technical equipment used in this video conferencing research study (see Appendix A; for product specifications go to www.dlink.com/products/DVC1000). It was chosen for a number of reasons including its anticipated suitability in the given context of a long-term care home based on a preliminary assessment involving the researcher, Sherry Klymyshyn, and IT support staff from the selected long-term care research site. Note: residents were not able to be part of the preliminary assessment (see Appendix A), in December 2003, because transportation to the off-site location was not available in the short time frame required and equipment was not authorized to be set up on-site.

The i2eye DVC-1000 uses a television with remote control rather than a computer and a mouse. Consequently, it works with familiar technology accessible to most long-term care home

residents and is perhaps more user-friendly to an elderly population, who may have limited finger dexterity, vision hearing, and memory loss.

Given its seemingly easy setup, its simplified process (i.e. automated IP address), large clearly marked menu keys displayed on the TV screen, along with good quality audio and video outputs, it was suspected that frail seniors would enjoy and be able to control the i2eye videophone conferencing process more easily than other computer video conferencing camera systems. The i2eye videophone DVC-1000 has received excellent reviews and awards (i.e. Innovative Product of the Year 2003, NextGen Electronics Editor's Choice, Electronic House Product of the year 2003). It was also chosen because the i2eye DVC-1000 is compatible with WebCameras. Therefore if family members have a computer with a WebCamera hooked up to it, provided they have highspeed Internet and Netmeeting software, the LTC resident would be able to contact them using the i2eye DVC-1000 (although the quality of the Video Conference interaction is greatly affected by the quality of the Webcam). Case studies are available on the D-link website but there is no documentation of its use in a long-term care home setting.

Initially two i2eye DVC-1000 videophones were purchased for this study. An additional two i2eye DVC-1000's were acquired later for family at the far location. A wide-angle lens was added to the videophone at the long-term care site part way through the study in order to accommodate a wider range and large group of participants. An independent highspeed internet access line was required, installed, and maintained for six months at the expense of the researcher. The service provider did not donate the highspeed internet as requested.

NOTE: At the end of December 2003, two video conferencing machines (D-link's i2eye DVC-1000) were temporarily obtained to begin evaluation of their potential use in a specified long-term care facility. Because the equipment was on loan for a short time, a videotape was made in an effort to demonstrate the simplicity of video conferencing using the i2eye DVC-1000. It was obvious at the time that without any "hands-on" experience, the concept and process may be confusing, particularly for some elderly people. An effective way to demonstrate video conferencing to the resident group was required. Funding and/or access to the equipment was an issue that needed to be addressed. I approached the manufacturer, the local business, and the

long-term care facility for technical support but was turned down. For information on testing, initial responses and follow up, and the demonstration videotape see Appendix A. For more detailed information about the i2eye DVC-1000 go to www.dlink.com/products/DVC-1000.

Besides the obvious, equipment acquisition/funding issue, three concerns affecting participation were identified at the start of the setup and recruitment phase of the Interactions Face-to-Face project.

Selecting a location within the long-term care facility: Ideally, residents would video conference in their private rooms. This would require a wireless system but range was a concern given the concrete and steel beam construction of the building. Possible Internet hookup sites were identified and two locations scouted with staff. Consideration was given to comfort level, privacy, and sustainability.

Arranging the connections at the far location: This was anticipated to be the most challenging part of the setup, dependent on families' existing setup and/or technical know how. Families may be willing and eager to participate but may not have access to necessary equipment.

Volunteers: Based on the experience and recommendations of previously mentioned program initiatives, careful consideration was given to maintaining a base of volunteers for technical support to the residents. For example it is recommended to use volunteers that are already actively involved and committed to the long-term care facility. The volunteer coordinators at Varcityview assisted with recruitment.

4.2. Research Design

This qualitative study goes beyond understanding to action. It is a social action inquiry characterized by high participation by stakeholders, a commitment to social justice, and an ethic of caring (Lincoln, 1998). In this study the most important stakeholders are first, the long-term care residents, and secondly their loved ones. The commitment is to exploring strategies and supporting efforts to improve long-term care residents' quality of life. The commitment is to

positive learning in the fourth age with a particular focus on family involvement and intergenerational understanding; to enhance quality of life by working together with long-term care residents to explore a new pathway for face-to-face interaction and providing people of all ages opportunities to see and hear each other. The ethics of care in this study is based on neighbourliness, family values, the Eden Alternative principles, and my grandma's story.

I have chosen a qualitative approach because it is imperative the study be designed in such a way that first and foremost, residents' voices are heard. To make appropriate change the residents should guide actions taken. This approach is in line with the Eden Alternative Philosophy, specifically, Eden Alternative Principle Number 8: An Elder-centred community honours its Elders by de-emphasizing top-down bureaucratic authority, seeking instead to place the maximum possible decision-making authority into the hands of the Elders or into the hands of those closest to them (www.edenalt.com). Thus there is a need to hear voices of the residents in long-term care along with their family members who geographically are distant to further determine the need and form access to the information communication highway should take in a long-term care home setting. Cognisant of the realities of living in the new millennium (i.e. longevity, family mobility, technological advances), action is required to provide a compassionate response to the concerns of isolation, loneliness, helplessness, and boredom in long-term care. Lincoln (1998) identifies some of the new and emerging criteria for judging quality educational research that is committed to action. They include the idea of *community as the arbiter of quality* or *neighbourliness* (Savage, 1988); *positionality* which takes account of the social location of the knowledge producers, and seeks to bound and frame knowledge in terms of where and from who it came: *voice; reciprocity and caring*.

The criteria of reciprocity and caring address the issue of distance and neutrality in the research process and product. Reinharz (1978) acknowledged reciprocity as a high-quality research characteristic in which parties to the research effort and their relationships were marked by a deep sense of trust, caring, and mutuality. Lincoln (1995) defines reciprocity as "the intense sharing that opens all lives party to the inquiry to examination" (p.283). Because of the person-centred nature of qualitative interpretive work, reciprocity is argued to be essential. Lincoln (1998) states,

Reciprocity and caring are criteria which exhibit great fit with emerging relational models of research...but which would be not only out of character, but would be despised in conventional research...posing a threat to the social and scientific distance and neutrality promised by modernist science. However, reciprocity and caring make a good match to social science when the purpose of that science is not the accumulation of supposedly neutral knowledge, but rather the acquisition of knowledge for praxis, for action, for community building, and for the amelioration of some social predicament. (p. 23)

4.3. Collaborative Approach

Collaboration, teamwork, is important because often times in research and daily living, actions are taken on behalf of the elderly people rather than in consultation with them, a situation particularly evident within the long-term care context (Kane, 2005; Martin, 1999; Williams, 1990). Decreasing involvement in decision-making processes affects residents quality of life by taking away their independence, individual insight, and has the potential to promote learned helplessness (Kane, 2003; Thomas, 1999). In a 2002 *Help the Aged* U.K study, which looked at what older people want in terms of service provision, the elderly indicated “they want to be involved in planning and developing activities. And they want solutions tailored to their particular needs.” (p.126, Wenger & Burholt, 2004) Residents and family hands-on involvement is key in the exploration of video conferencing and the decision-making process about its function and sustainability in a long-term care context. This qualitative study with its focus on residents’ experience and feedback first, honours and gives voice to residents and family members, in accordance with Eden Principle 8, which explicitly calls for an Elder-centred community which honours its Elders by de-emphasizing top-down bureaucratic authority.

My thoughts and actions regarding empowerment are guided by the basic principles of lifelong learning in an aging society, as Gelpi (1979:70, cited by Cough 1991:151) concluded:

Let us be clear that it is not a matter of giving power to older people but of restoring them the right to live, not merely to survive; to be as others, and not to be left on one side; to continue to enquire into things, to make discoveries and to develop interests of their own.

In other words, hands-on involvement/exploration is critical.

Thus, it was important to me to do the research in a collaborative respectful manner that will directly benefit the participants. This approach and responsibility to give back is an emerging criterion of quality qualitative research reflective of a relational model of research (Lincoln, 1998).

4.4. Researcher Context

In qualitative research the researcher is the primary instrument for data collection and data analysis, thus it is important to introduce myself and acknowledge my relationship and position as it is relevant to this study.

With a degree in education, I have taught various age groups as well as developed and evaluated programs for seniors and preschoolers. For 10 years I taught adults and seniors, newcomers to Canada, English as a Second Language, a subject that focused on developing communicative competency. I have always enjoyed the social interaction involved in learning and teaching. Subsequently, I have mixed reviews about my experience with distance education. The subject matter of the five correspondence courses I took interested me, but I much prefer learning in relation with others. Later I taught teacher-training courses on-line, which had evolved to include a discussion group component (e-mail and chatroom style). However I still didn't feel that I knew members of the group as well as in a traditional face-to-face classes. I preferred a lively conversation in the presence of others. Video conferencing capabilities were just starting to develop in education and I was aware of such technology through conversations with my husband and his colleagues-engineers - communication technology researchers. My direction shifted to family and long-term care when I was on maternity leave with our second child. It was at this time that Grandma was admitted into the "long-term care facility".

I am an Eden Alternative Associate, which means I have taken a three-day training workshop in the Eden Alternative Philosophy. I am not employed by the designated long-term care home but I have been a volunteer there since the Spring of 2003. This home is the place I completed my

Masters of Continuing Education Program internship placement (September 2003 to April 2004). A major focus of this internship was to become involved in the community and explore computer use and video conferencing viability. During the internship I assisted a few residents in the home's computer room and regularly visited a few residents. I gathered some background information for the research proposal during the internship and Eden training. As noted earlier, the Interactions Face-to-Face study was approved on ethical grounds by the University of Saskatchewan Behavioural Sciences Research Ethics Board, on September 19, 2005, and the designated long-term care home Ethics Board, on November 1, 2005.

I approached this study as an educator with an educational gerontology perspective; as a concerned family member of a long-term care resident; as an active volunteer in my community; and as a potential long-term care resident.

I inquire and take actions to build an access road to the information communication highway for and with residents in long-term care in order to maintain family connections and increase social interaction with residents using video conferencing. Participants including Volunteer Department Staff were not aware of my grandmothers story or the struggles I encountered as a concerned family member trying to get video conferencing set up for my grandma when she was in long-term care.

4.5. Research Site: Varcityview Long-term Care Community

Varcityview (pseudonym) is home to 268 residents who require mostly level 3 and 4 care by Provincial Healthcare standards. Staff is encouraged through policy-behaviour guidelines to challenge the status quo of institutional life in the pursuit of improving quality of life for the residents. They have relaxed meal times and family-friendly policies (i.e. open visiting hours - not a fixed time) The mission statement of this long-term care home: *To provide an environment that enables residents to live full and abundant lives.*

Varcityview is a registered Eden Alternative care home; thus promoted as a resident-centred community guided by the 10 principles of Eden. It has an onsite daycare, companion animals

include cats, dogs, fish aquariums and a bird aviary. There is also a gardening centre that is run by an employed master gardener. A centrally located computer room, which has three computers with Internet access using the Regional Health network, is available to residents, visitors, and staff. (But I question how accessible it is to residents.)

Some technology related observations and constructive criticisms: Computers are presently set up for independent use rather than interactive learning. There is no computer training for the residents and assistance is limited despite this home's strong volunteer base with intergenerational initiatives and signed partnerships with a number of schools and community programs. On the homepage of this Health District, computer classes/workshops for employees are highlighted. This particular homepage is sometimes visible on the computer monitor. What message does this send to the residents? Occupational Therapy oversees the computer lab but in my opinion there are some oversights, for example volunteers are not trained or briefed on things to keep in mind when assisting residents with computers. The Manager of Recreation and Occupational Therapies has indicated that staff needs support and encouragement to use computers. A number of the staff she is responsible for do not feel comfortable using computers. She has encouraged them to get more familiar (i.e. professional development opportunities) as computer skills will become part of their job requirements, particularly as new residents come in with computer skills, which they want to maintain.

Unable to get official clearance to connect video conferencing equipment to Varcityview's existing Internet access service, I installed a separate line at my expense specifically for video conferencing. In order to proceed with the project I also provided all the technical equipment.

4.6. Participants: Residents, Family and Volunteers

Participants consisted of three long-term care residents and the people they connected with in the video conferencing process including family, friends, and volunteers. Through word of mouth, mainly from recreational staff, and Quality of Life Co-ordinators within the long-term care home, 5 residents were identified as potential participants and were approached by the researcher from which 3 resident participants, John, Rose, and Katherine, were selected for the study. The

subsequent 3 clusters that formed were used to collect the data for this exploratory study. A cluster consists of: 1 resident participant, her/his family and friends (video conferencing communicants and local family), as well as volunteer(s) providing technical support.

4.6.1. Selection Criteria

The selection criteria for the resident participants and subsequent clusters were as follows:

- The resident expresses an interest in video conferencing and willingness to be part of this 3 month study.
- The resident is high-functioning cognitively.
- The resident's length of residency at the long-term care home, background, and comfort level/familiarity with modern technology (i.e. computers) also a consideration, so that between the selected resident participants a rich source of data and variety in vignettes can be presented in the final document.
- The resident has access to the technology (a highspeed internet connection was installed and the i2eye video conferencing equipment setup at the long-term care home for the three month duration of the study at the researcher's expense.)
- The resident has family or friends who are willing to be video communicants and agree to be part of the study.
- The family or friends (video communicants) have access to required technology. They need a highspeed internet connection and a compatible video conferencing camera (the i2eye DVC-1000 may be supplied by the researcher). If the camera the family uses is hooked up to their computer then Netmeeting software is required for compatibility with the i2eye DVC-1000 at the long-term care home.
- Locations of the resident participant's family or friends may be a determining factor in their ability to be video communicants, if volunteer help for technical support for the family is required beyond a phone call to talk them through the hookup process and confirm an IP address.

4.6.2. Participation

The residents, family members, and volunteers were engaged in the study as outlined below:

Resident participant:

- Identified the person(s) she/he would like to video conference with.
- Participated in video conferences over a three month time span but not required to use the equipment independently. Some of the video conferences were observed by the researcher when the researcher assumed the role of the volunteer. Note, resident and their family were given some privacy during each call.
- Maintained a memory log. (see journals)
- Participated in three, one-hour in-depth interviews. (see methods section and interview guides)
- Had the option to be part of video conferencing demonstrations for other long-term care residents and groups at the home or in the community.

Family and Friends (the video communicants):

- Worked cooperatively with the researcher and/or volunteers to make the required technical hook ups at the far location.
- Video conferenced with the resident/a relative in the designated long-term care home over a three-four month period.
- Participated in a one-hour telephone interview with the researcher near the end of the three-month trial period. (see interview guide)

Volunteers:

- Were available to assist resident participants with the i2eye video conferencing equipment throughout the three-month term. Prior to assisting they attended a training workshop.
- Assisted resident participants with their memory log after each video conference.
- Completed a written survey at the end of the three-month trial period. (see Appendix D)

4.6.3. Recruitment

First, a letter was sent to the long-term care home requesting their help in recruitment and permission to research in their facility. Upon approval from their ethics committee, November 1, 2005, residents were approached and selected for this study by word of mouth. The Recreational staff first generated a potential resident participants list that was given to the Director of Volunteers. Then she and I attended a consultation with Varcityview's Quality of Life Coordinators, at which time the list was reviewed and modified to include a total of five potential resident participants, with family who might also be interested in the study. Next, a visit between the potential resident participant and researcher was arranged through staff. The purpose of the visit was to determine suitability for the study, and confirm the residents' voluntary willingness to participate in the three-month trial period. Residents needed to indicate whom they would like to contact for the video conference. Then verbal consent from resident's family and friends to participate in a video conference at the request of the long-term care resident was obtained via a telephone call. As well, verbal consent was obtained from family and friends (video communicants) to participate in a post video conferencing interview via phone to gain feedback on their experience.

As a volunteer within this long-term care home, I, the researcher, knew one of the resident participants prior to the study. In the past three years, I regularly visited Rose and sometimes assisted her with computer tasks. This particular resident, was not on the staff generated list for various reasons. Given careful consideration by the researcher, and further consultation with staff, Rose was eventually invited to participate.

Volunteers were critical to this study and the sustainability of a video conferencing service/program. I anticipated an intergenerational component within the family as well as between the resident and volunteer. A setting that encourages relationships between the volunteer and the resident, was deemed key to the learning process, as in previously documented computer/internet access programs (i.e. Seniors in Cyberspace). Documented computer projects involving frail elderly also recommend using volunteers that are already actively involved and committed to the long-term care facility. Varcityview has a strong volunteer base and agreements

with various schools, and university practicum students. The Director of Volunteers was very supportive of the video conferencing initiative and assisted with volunteer recruitment for this study. The researcher provided an introduction to the study, parameters of involvement for volunteers, and got written consent from the volunteers to be part of the study. The researcher provided training on the i2eye video conferencing equipment, whereas Volunteer Services personnel provided an orientation on the long-term care home for new volunteers.

4.7. Data Collection Methods

To ensure accuracy, a variety of methods were used including observations, journals, interviews and volunteer survey.

4.7.1. Observations

I observed and assisted in some of the video conferencing sessions. I recorded observations during and reflections after these sessions. It was important for me to see first hand what occurs in a number of video conferences between resident participant and video communicant. The type of information noted included: initiating the connection and ending of the video conference (How is the resident involved? What does the volunteer do?), general topics of conversation, physical responses/reactions (facial expressions, eye contact, indicators of emotion), elements of spontaneity and humour, technical (picture quality, audio quality), anything that appears to interfere or detract from the face-to-face interaction. How does the resident participant feel before the video conference and immediately following the interaction? How long has it been since the resident and the video communicant last communicated? To what extent does the resident participant interact with the volunteer before, during, and immediately following the video conference?

4.7.2. Journals

Two types of logs were maintained.

- i) *Memory Log* - A memory log of video conferences was maintained throughout the three-month trial period for each of the resident participants. With the assistance of volunteers, information was written in the log following each video conference. Items written in the log included: date, time, person(s) contacted, resident's observations, feedback and reflections (resident's feelings about the interaction and any comments they want noted), technical (sound quality, picture quality, ease in making the connection and using the i2eye). Following the three months of data collection and analysis of this data, the memory log was given to the resident participant as a keepsake.
- ii) *A Research Journal* - This was kept by the researcher and used to maintain an audit trail, which is a detailed account of the methods, procedures, and decision points in carrying out the study. Following Merriam's (2002) guidelines my research journal included reflections, questions and decisions on the problem, issues, ideas encountered in collecting data, and a running record of interaction with the data as I engage in analysis and interpretation (p.28). It was important to capture reflections and thoughts about myself as a researcher, about data collection issues, and about interpretations of the data. Doing so acknowledges that the researcher is the primary instrument for data collection and data analysis, which is a characteristic of qualitative research. *Reflexivity* or researcher's position is important to document in qualitative research to address validity and reliability issues. (Lincoln 1995, 1998; Merriam 2002)

4.7.3. Interviews

I conducted three one-hour in-depth "conversation style" interviews with the resident participants, as well as a one-hour telephone interview with the family of the resident participants. An informal interview process was used to allow participants the freedom to provide a rich description of their thoughts, ideas, feelings, and experiences with video conferencing using the i2eye. (see interview guides listed below) Interviews were tape recorded and transcribed. For analysis, a complete transcript was made of each resident participant interview along with edited transcripts of family member's (video communicants) interviews. Copies of the transcripts were given to the respective participants to review. A transcript release

form was then signed. The participants were informed that the transcribed data might be reconstructed into a story.

Interview Guides for Resident Participants and Family Members

- **Residents** (individually three, one hour visits - conversation style interview) open-ended questions: What has this experience of video conferencing meant to you? Put it in context of life before moved into the long-term care home, and life now; Visit (1) Life before came to this LTC home, Visit (2) Life at this LTC home, Visit (3) The Video Conferencing experience. What did you like? What was problematic? Recommendations. To what extent has this initial video conferencing exploration been beneficial to you? Did the video conferencing/video phoning increase your face-to-face contact with people? If so in what ways? Connectedness: By being part of this initiative do you feel a stronger sense of belonging or connectedness (i.e. with family, friends, other residents, and another generation)? Has it in anyway affected your feelings of isolation, loneliness, helplessness or boredom?
- **Family members** (one hour post experience interview to be conducted via video conferencing or telephone call): What has this experience of video conferencing meant to you? How do you feel about this kind of face-to-face interaction with your loved one in long-term care? Was it helpful to you in any way? What did you like? What was problematic? Recommendations.

4.7.4. Volunteer Survey

Near the end of the three-month study, the volunteers were given a written survey, which took about 30 minutes to complete. The purpose of the survey was for volunteers to reflect on their video conferencing experience, to provide insight to what the video conferencing experience has meant to them and gather suggestions to enhance the experience for future participants. (see Appendix D)

4.8. Ethics

The criteria for quality in this new research for action are also standards for ethics (Lincoln, 1995). In her more recent article Lincoln (1998) states, “The new criteria which address quality almost equally address the nature of the relationships between researcher and researched, and the ethical content of those relationships” (p. 22). This statement reinforces her earlier notion,

Relationality is the major characteristic of research that is neighbourly, that is, it is rooted in emerging conceptions of community, shared governance and decision-making, and equity. Indeed, community and neighbourliness may be the most compelling metaphors for these emergent forms of inquiry and quality in inquiry. (Lincoln, 1995, p.287)

4.9. Representation

The data is represented in story form for a number of reasons. First, as Nel Nodding said, *stories have the power to direct and change our lives* (Carter, 1993). Shared stories have profoundly influenced my desire to pursue this particular graduate thesis work as I discussed in the first chapter. Second, storytelling and story-writing have a valuable role to play within the field of gerontology as highlighted at the Canadian Association on Gerontology Annual Conference (2003) where Clark (2003) emphasised that story-writing and story-telling are essential components in the learning experience and Ryan (2003) noted that recording one’s life story offers older adults many benefits: perspective on life, sense of accomplishment, legacy for family, deeper intergenerational relationships, and enhanced conversations. The process and the product of this thesis research should be of benefit to the participants.

Dr. William Thomas (1999) created an engaging and provocative story to communicate his vision for a better world: the Eden Alternative. In the foreword of his book it is noted that wisdom comes to us in stories. In the final pages, Thomas writes:

The principles [Eden Alternative Principles] laid out in this book are not new. In fact, they are very old. The challenge before us then is not one of discovery but of practice. **How can we reassert our fundamental humanness in the face of modern life and all its challenges?** Our deliverance lies in the sharing of stories... (pp. 226-227, bold added)

In the next chapter, you will be introduced to John, Rose, and Katherine, the three long-term care resident participants, and read about their video conferencing experience with family; stories of TVcalls, Reacquainting Visits, and The Young and Restless.

CHAPTER 5 - PARTICIPANTS' STORIES: THE VIDEO CONFERENCE EXPERIENCE

In this chapter you will meet John, Rose, and Katherine, the three resident participants, and the people they connected with in this hands-on exploration of video conferencing. You will read about their video conference experience: Stories of TVcalls, Reacquainting Visits, and The Young and Restless. For ease in recording and reporting the video conference experiences, participants are grouped into three clusters. This configuration highlights the relational aspect and the support structure provided during the video conference experience. Each cluster consists of: a resident participant, family (video communicants and local family), and volunteer(s). Table 4 illustrates the structure and number of participants overall.

This chapter is organized into five sections to present the gathered information/data. The first three sections profile the three clusters individually. In order to put the video conferencing experience into context and present various perspectives, each cluster section is structured into four parts: introductions and background information first, then the resident's video conference experience story combined information gathered from their memory log and third in-depth interview, followed by the family's response to the experience gathered from an informal telephone interview near the end of the four-month experience, the last part features the Cluster's timeline, Frequency, and Critical Technical Aspects for quick reference and cross reference with the other two clusters.

The fourth section of this chapter focuses on the work of volunteers. The volunteers were the only participants to move among the three clusters, and this section highlights their role in providing the video conferencing service. Volunteers were deemed a critical component of the video conferencing project and its sustainability within a long-term care home context. Recruited volunteers were trained (in a one hour workshop) to provide technical support for resident

participants during video conference calls (i.e. turn on/off equipment, adjust volume, focus picture, report technical problems, schedule next call). Based on findings from previous computer projects/studies involving elderly long-term care residents, a connection/positive relationship was encouraged and anticipated to develop between the resident participant and the volunteer. The volunteer section is divided into four parts: recruitment and duties, feedback from the residents and family about the volunteer support structure, volunteers' response to the experience, and then a discussion on volunteer challenges.

By the end of this chapter, one will be able to answer the questions: Who were the people involved? What happened during their exploration of video conferencing? How do they feel about it? What does video conferencing mean to these long-term care residents and the people they connect with in the process? The fifth section highlights some of the participants' concerns and suggestions for sustainability.

Table 4: Participants

Number of Participants			
() parentheses indicate children under 18 years old			
	Cluster 1	Cluster 2	Cluster 3
Resident	1	1	1
Video Communicant	2	3	2+(3)
Local Family	3	1+(3)	0
Volunteer	1	1	-
	<hr/>		
Subtotal	7	6+(3)	3+(3)
Other: 2 resident volunteers, 1 Technical Support volunteer, Volunteer Dept. staff, 3 trained volunteers			

5.1. CLUSTER 1: Introductions

It is important to recognize the long-term care resident's prior experience and present situation including family involvement in order to put the video conferencing experience into context. Background information about residents' life before long-term care; life at present in the long-term care home, gathered through two in-depth interviews, is briefly provided in the introduction (first part of) each cluster section, along with information about the people the resident chose to share the experience with. Information about the family, video communicants, and volunteer was gathered during the recruitment and technical setup phase of this project. All provided information has been verified by the participants.

- **Resident Participant:** John came to the long-term care home two years ago after he fell and broke his leg and required a higher level of assisted care. Prior to his accident he lived in an independent living community for approximately twenty years. John now shares a room with one other person and is a very active resident involved in many of the activities offered at the long-term care home including: wine-making club, gardening, baking, music, and bible study. His friendly, cheerful disposition is evident as he smiles wholeheartedly and talks with many residents while on route to a video conference or any other activity. John takes the bus, to Cosmopolitan Industries where he works four days a week, and to church on Sunday where he meets his mother. On his days off, his mother regularly comes to visit him at the long-term care home. John has three sisters; one lives here in the city. He enjoys being around family and listening to country music. Johnny Cash is his favourite singer.
- **Video Communicants:** Two of John's sisters participated, one in British Columbia, the other in Ontario. Both work outside the home in health-related fields. Both have a computer with highspeed internet but neither had a video conferencing camera. I sent an i2eye video conferencing camera to each of them and arranged volunteer technical assistance to get it set up on their television.
- **Local Family:** John's mother, sister, and girlfriend who is also a resident at the home, joined in the video conference experience with John at various times during the study.

- **Volunteer:** John requested help from a university practicum student/volunteer for the long-term care home who assisted him with other activities prior to this video conferencing project. They often got together for activities on Saturdays (i.e. baking cookies, outings, and eventually video conferencing). She attended the video conferencing training workshop in December and indicated, “she was honoured that he asked her to assist with the video conferencing.”

John has strong family support. Before video conferencing was presented as an option, the family already had frequent contact and good communication. They would telephone each other regularly. The three sisters usually telephoned and/or telephone conferenced with each other on Sundays. John and his mother took part in a few of the telephone conferences but both found the process a bit difficult to manage. The three sisters also communicate frequently via e-mail but John and his mother do not use e-mail.

The family had talked about video conferencing prior to me approaching them but they were “not sure how to go about it”. Through this video conference experience the sisters were able to involve and interact with both John and his mom at the same time. Through the families’ video conferencing experience together, as described below, they come to appreciate the significance of the visual component in conjunction with the audio. They look forward to their “TV calls”, a term coined by John which aptly captures the basic process of a video conference based on the equipment used for this study.

5.1.1. TV Calls: John’s Gift to His Family

Video conferencing equipment, provided by the researcher, was shipped out to both sisters just before Christmas. Neither sister was able to come home for the holidays, to the city where they were raised, where John and his mother still live, but with the new equipment added to their television both were able to visit face-to-face with John, to see and talk with him even though they were in different cities across Canada. John’s first video conference call was with his sister in Ontario whom he had last seen in the summer, six months earlier. During that call, he was

also able to view and visit with his brother-in-law and nephew while his eldest sister was with him at the long-term care home. During that visit they giggled and laughed a lot. John commented: “I think I am going to like this. It is going to take a bit of getting used to.” The first entry in his memory log, stated, “This [the video conferencing] is my Christmas present to my family.”

On New Year’s Eve, John and his sister in British Columbia were able to video conference together for the first time. His sister showed him the gifts she received for Christmas. John was excited to see her and since he loves dogs, it was wonderful for him to also see her dog. The last time he was at her home in British Columbia was over six years ago. When this sister was home last summer she met John’s girlfriend. John was happy to share this new experience with his girlfriend, and she was delighted to visit this way with John’s sister in British Columbia. John commented in his journal entry for December 31, 2005 “I think my mom would really enjoy this.”

John took steps to share the video conferencing experience with his mother, eldest sister, and girlfriend, who all live in the same city. He first verified they could join in and then continued to invite them to participate at the long-term care home. Their involvement was welcomed and significant. His sister in Ontario recalled, “One day, my brother’s girlfriend came into the room to be part of the call. It was nice for my brother to include his girlfriend and for me to see them together.” While his eldest sister came for two “TV Calls” it was John’s mother, who after her first two TV Calls in January, frequently joined John and his sisters in subsequent scheduled Sunday afternoon visits. They usually consisted of two 30-minute conferences back to back, the first to the sister in British Columbia immediately followed by one to the sister in Ontario. John and his sisters appreciated that they were able to include their mother in the calls. As the sister in British Columbia states,

“This was very nice. It was like going to visit for tea. This project was set up with our brother, but we discovered very early that we could also include our Mom. We all enjoyed those visits and looked forward to our TV calls. It created more of a social atmosphere, and we were able to spend special time with our brother and Mom, even though we are far away. When we talk on the phone with them, we only talk to one at a time, not both together.”

What is John's response to this kind of interaction with his sisters in Ontario and British Columbia? During the first interview in January, John emphasized,

“Family, I like to be around them. That's why I like the video conferencing. I can see them and be around them more than on the telephone. It is something new. I like learning new things.”

While John was not physically capable of turning on the equipment, due in part to the position of the camera above a large screen television, and while he struggled to use the remote control, he became knowledgeable of the steps to follow to turn on/off the equipment, to connect a call by using speed dial, and to end a call. John was able to recite the steps as the assisting volunteer physically completed each one. Note: It was not the goal or a requirement of this project for the resident to use the video conferencing equipment independently. Rather, the focus of the project was to ensure that each resident participant and resident's family have access to equipment; the opportunity to experience video conferencing if they chose to, and to offer supports (i.e. volunteers to assist with the technology), so that each resident is able to interact with family using video conferencing technology. This objective was achieved. John understands now what a video conference, or as he refers to it, a “TVcall,” entails and enables him to do.

From January to the end of May, John and his family video conferenced more than 20 times with scheduled calls every 1-2 weeks inclusive of special holidays like Easter Sunday and Mother's Day. The family was very appreciative that they were able to “*get together*” on designated holidays and to “*see each other*” more frequently than once a year. The family was also very respectful of John's routine and worked the scheduled TVcalls around the activities that are important to him. In fact one sister stated, “I would have liked to visit every week but John felt that was too much.” Records indicate that two video conferences were cancelled due to illness and once due to technical problems, only one of the more than 20 video conference visits was cut short due to technical problems.

As for the quality of the TVcalls, John responded positively to every visit despite a few interruptions and an occasional repositioning of the microphone. He remembers his first call,

which was just before Christmas. “It was good. They all have been good.” In what ways were they good?

“I remember seeing my sister, her funny pillow, and her dog. I like dogs. The last time I saw her dog was when we went to their place about six or seven years ago. It was before I had the fall because since the fall I can’t travel there. It is too difficult.”

The microphone taped to the front of John’s shirt provided good quality sound and worked well for him. He explains, “I didn’t have to hold on to anything. It is difficult for me to hold on to a phone sometimes. The microphone was very good for me.”

When asked to talk about challenges faced with the TVcalls, John did not have an immediate response. He highlighted “I didn’t have problems seeing either of my sisters. I could see them both.” The question rephrased: How did it feel when there were technical problems or interruptions during a visit? He recalls a few examples, “Yes, one time we had to cut short a visit because the picture was choppy [pixilated] and the sound kept breaking up.” It was noted in his memory log on this occasion that it was a really stormy day, blizzard like conditions and perhaps weather was a factor in the poor connection. “A few times the microphone fell and/or needed to be repositioned. And one time there was the loud noise of a floor-waxing machine going up and down the hallway. And another time they [staff] were testing the Emergency procedures over the PA system right in the middle of a TVcall.” We laugh. It is evident that some problematic situations which John encountered were technical, some circumstantial, and some simply beyond our control.

In summary John states, “The visits were great. Even on the times when we had problems it was good to visit this way.” “It was the best gift I could give.”

5.1.2. John’s Family’s Response

In accordance with the third objective of the Interactions Face-to-Face study, I conversed with the family (video communicants) in a one-hour informal telephone interview at the end of the study to document their initial reactions, thoughts, observations, and ideas pertaining to video

conferencing in a long-term care home context. Responses from the family are presented in this section based on the notes taken during the interview that were then sent to family to confirm accuracy. Family participants also verified the write-up of this section. The points presented are those that the family emphasized were significant. The opening main question was: How do you feel about the video conferencing? Have your feelings changed over the past four months?

Both John's sisters responded favourably to the video conferencing experience with a growing sense of attachment to the process. His sister in British Columbia stated,

“We've had this wonderful opportunity. I now notice and think about what I would have missed out on if I hadn't video conferenced, things I wouldn't have been able to share. For example showing my dog which my brother loves, seeing my brother and my Mom as I haven't seen them since last summer, visiting with my Mom and brother at the same time.”

John's Sister in Ontario said,

“I feel good about it. It has been a wonderful experience. At first - following the initial setup was getting over the hump of learning the technology and how this form of communication works. I am comfortable now with the technology. I feel I can rely on it. I am now more relaxed. Not as comfortable as I am using the phone but the added visual component counter balances that. The visual is just invaluable. I find it very rewarding.”

John's sister in British Columbia agrees the visual was/is significant, exemplified by the list she compiled and e-mailed me at the end of the study.

“The Visual feature of Video Conferencing: a positive

- 1 able to see family members
- 2 see how doing given awareness of health issues
- 3 note that Mom and my brother were not ill during any of the calls.
- 4 You are able to take in different information /assess the situation differently given the visual unlike during a telephone call.
- 5 The next best thing to being in person.
- 6 The wide angle lens was good in that it made it possible for two or more people to be viewed on the screen.”

compiled by John's Sister in BC

John's mother, who actively participated in TVcalls and was present for John's first and third interviews, provides her view of the video conferencing experience:

“It was good to be able to just go up to the quiet room sit down and visit with them [*on the television screen*]. It's so different from the phone. I would sit down [*in front of the television*] and see them as we spoke to one another. They in their homes and us here at the long-term care home. So different from the telephone. So nice.”

John immediately agreed with his mom during the final interview adding, “It is different from the telephone. It's better. The telephone is ok but with the TVcall I can see family face-to-face while I talk.” Combined, their comments highlight that with video conferencing one can see the other person(s) in their environment and that such an experience was enjoyable for this family.

John's sister in British Columbia stated “We did more *visiting* not discussion of issues we were conscious about privacy.” She describes visiting as “more social and relaxed, talking about what is happening with them and other family members, going with the flow, no particular topic.” Even though she, John, and other members of the family didn't discuss issues like they may have if they were on the telephone, she strongly felt there is value in being able to visit this way. The TVcalls, “created a balance in our contacts with them (brother and mom). During our phone conversations with our brother and Mom, we often have issues or health concerns that we need to discuss and focus on, as well as trying to have a more social visit.”

Similarly, John's sister in Ontario indicated the video conferences were used more as a means to “visit” than to discuss sensitive family business as they might do on the telephone. She explains,

“The visual medium is not as private as a telephone call. We were aware that my brother was in a more public setting given the location of the video conferencing equipment (a quiet lounge with a curtain pulled across the entrance and a privacy sign posted). But even if the equipment were in his room [a semi-private room], with his shared living arrangement in community living, one is never assured of privacy.”

Regardless of privacy concerns, she agreed that the video conferences were useful.

“I got different input from it. It was more about spending time with someone, and the video conferencing is more interactive. I could see them (my brother and my mom), see their facial expressions, see their level of vitality. This is very precious.”

On a technical note, she pointed out that the microphone attached to her brother’s shirt for the TVcalls allowed his voice to be heard more clearly and was better for her brother given his limited manual dexterity and physical condition of his hands. “It is difficult to understand him sometimes when we talk on the telephone and hard for him to hold a phone.” John made a similar comment about the equipment in his final interview as noted earlier. Thus these comments show that for this long-term care resident the adaptive communication equipment effectively enhanced his ability to communicate with his family.

Sustainability or how this study would approach continuation was a topic that both sisters broached in an initial teleconference discussion between the three of us, which they requested during the recruitment phase. Following their family’s video conferencing experience in separate telephone interviews they made these comments about continuing and sustaining video conferencing within the long-term care context. John’s Sister in BC revealed,

“Initially I thought this would only be until March. The extra time has been a bonus. When we first started I tried to prepare my brother for the fact/reality that it [the video conferencing project] was *temporary*, the video conferencing wasn’t guaranteed to continue and was he OK with that. He wanted to try it, to experience a video conference (or TVcall as he now refers to it). At the time, I didn’t realise how attached I would become to our video conferencing visits.”

She reiterates, “I would like to continue. It has been very enjoyable.” And further points out, a need “to find creative ways to make it cost effective and accessible to residents and their families who have varied financial means,” as is the situation with their extended family.

John’s Sister in Ontario stated, “I would like for the video conferencing to continue. It has been a pleasant experience and an asset for our family.” She emphasizes, “Staff: I think they are key in

sustaining this type of project. They could be good advocates particularly as people realize what it means to residents.”

5.1.3. Cluster 1 Overview: Timeline, Frequency, and Technical Aspects

TVcalls

First Video Conference Call: December 21, 2005 with Sister in Ontario - Merry Christmas
December 31, 2005 with Sister in BC - Happy New Year

From End of December 2005 to the End of May 2006

of calls completed: more than 20
cancelled: 2 - illness, 1- technical
cut short: 1 - technical problem

Frequency of calls: every 1-2 weeks, 2 calls back to back with his sisters
30 minutes each.

- Family very appreciative that they were able to video conference on holidays/special occasions (i.e. Valentine’s Day, Easter Sunday, and Mother’s Day)
- Sunday visits: A number of the calls were arranged for Sunday so that both John and his mom could visit together with his sisters.
- Worked around John’s routine and activities - One Sister indicated she would have liked to visit every week but John felt that was too much.

5.2. CLUSTER 2: Introductions

- **Resident Participant:** Rose has six children, ten grandchildren, and nine great grandchildren. She has lived at the long-term care home for three years. In her room, on the wall opposite her bed are numerous family photos; in the centre is an eye-catching photo of an attractive woman wearing a red hat. “It is a photo of an independent strong person who doesn’t conform”, she says. It is a photo Rose took of herself years ago. She used to be a professional photographer and had a portrait studio with the motto ‘*Person to Person*’. She now spends a lot of her time looking at the photos on her wall. “Those pictures are great memories. I live them all over again when I look at them.” When she first arrived at the long-term care home she was involved in a number of the activities available (i.e. winemaking, singing, gardening, bingo) but has stopped attending most group activities because she says, “There are too many people and I don’t like socializing with some of the people that now attend.” Over the last two and half years she has learned to use a computer for e-mail, and games. Rose enjoys music, tending to her plants, telling jokes, and visiting with her family.
- **Video Communicants:** A video conferencing camera, provided by the researcher, was made available, throughout January, to one of Rose’s six children who had the required high speed internet. When setup did not materialize, the equipment was passed on to a second child. Rose’s son in Manitoba and his family had their first video conference with Rose on February 28, 2006.
- **Local Family:** Three of Rose’s grandchildren and their families live in the city but only one grandson and his three young children participated in this study.
- **Volunteer:** I assumed the role of volunteer for Cluster 2 and gave technical training, similar to the volunteer workshop, to Rose’s grandson, who tended to visit her on Sundays. This arrangement was made so that he could offer technical support during his grandma’s video conference when or if I was unavailable to assist as the volunteer, offering the larger extended family more opportunity to visit together if they chose. At the onset of this study staff stipulated that I be the only long-term care volunteer involved with Rose.

5.2.1. Reacquainting Visits: Rose's Video Conferencing Experience

Rose sits in front of a TV. With the push of a remote control button she instantly sees and visits with her children and grandchild over 500 miles away. She last saw them on her 80th birthday, four years ago.

Rose tells residents and staff, "The video conference experience is wonderful. It is like visiting my son and his family in person. Person to person. Like they are in my living room." Throughout her four-month exploration she comments numerous times, "I think it is great. I love seeing my son and his family on that TV."

Rose is quick to point out that she "never talked to the TV before". With this type of video conference, she explains,

"I talk to my son through the TV and I see him on the TV screen, our responses are immediate like the telephone. During the video calls [conferences] it is like he is sitting next to me talking. We have a coffee together. It is very neat."

The experience is different from a telephone conversation because it has the visual. Rose highlights, "I like the added visual provided in video conferencing which you don't get with a telephone call. The picture is PERFECTO!" She recalls her surprise 80th birthday party four years ago, and the enjoyment of seeing all her family in person. She compares that experience to her video conference experience,

"The video calls are sort of like halfway between a telephone call and an actual in person visit. It is like they are here with you even though you know they aren't because you can't hug them. Actually seeing them during the video call or in person means a lot to me."

The assisting volunteer notes that instead of hugging one another the participants, "blow kisses to one another, during the video conferences."

Before the video calls how did Rose keep in contact with her son and other family members? She admits,

“I am not much of a letter writer never have been, neither is my son. I prefer to talk on the telephone or visit in person. My kids come to visit me when they can. Occasionally, I talk on the telephone but it is expensive for me to telephone all my kids. I get letters, cards, photos of the new babies or special events in my kids’ lives.”

While she dearly loves to receive these letters and photographs in the mail, she notes, “With the video calls (conference) I can respond immediately and my family member(s) can instantly see my reaction.” Thus she liked the “in real-time” feature of video conferencing.

Rose was delighted to share the experience with family that come to visit her in-person at the long-term care home. In particular her grandson and his young children - her great grandchildren, took part in a few video calls. In her memory log she notes the childrens’ physical display of excitement, “The kids jumped around a lot, said hi and played peek-a-boo. They were busy being 5 and 7 year olds! That explains everything!” Her grandson’s response written in her memory log, there was a lot going on. It will take some time to get the turn taking figured out. When Rose recalls that Sunday visit she laughs. She also acknowledges, that her grandson and son hadn’t had a chance to visit in a long time. She provided them the opportunity via a video conference and was able to actively take part in that reunion. Later she mentions, “Any company that I happen to have during that time [Sunday evening], I know my son would be happy to see and visit with too.” Consequently, the scheduled Sunday evening video conferences worked well to bring more than two family members together at one time which is more than is possible with a person-to-person telephone call.

From the end of February to the end of May, Rose participated in seven video conferences including one on Mother’s Day. Due to a major technical problem at the far location, the Sunday March 19 call was cut short. Equipment needed to be replaced, so the next call was not until Sunday April 29. During this time, whenever Rose saw me at the long-term care home she asked about the equipment and the next call. The visits ranged from 30 minutes, to 1 hour and 45

minutes. Rose's response, "I would have never visited that long had it been a long-distance phone call, couldn't afford it!"

Rose was very appreciative of the opportunity to participate in the video conference project and quick to thank those who assisted her and her family in the process. She admits that she would not have been able to afford the equipment on her own nor been able to confidently use it, if left up to her to turn it on and adjust equipment independently. She found comfort in having a volunteer available to assist during each call (Note: two calls were cancelled because a volunteer was not available). In summarizing her video conference experience she stated,

"I don't really know it as video conferencing. **Rather than video conferencing I would call it getting reacquainted with your kids or reacquainting visits.** I sure would like to continue that is the closest I have been to my son for a long time. And I hadn't seen my granddaughter in a long time either. They aren't able to come here very often. It was nice to see them and my daughter-in-law. I didn't get to video conference with my grandson, their son, but I would like to."

Cost is a concern to her.

5.2.2. Rose's Family's Response

Rose's Son in Manitoba responded positively to video conferencing,

"My mom looks forward to it. She likes seeing us (me, my wife, and our daughter). It's a neat thing to see her too. I am 500 miles away – with the video conferencing I get to see her and her demeanour, without having to drive anywhere."

The face-to-face visits via video conference enable this family to see and enjoy each other's company more regularly, at a time that works with the family's busy schedule. As Rose's son points out,

"My in-laws live here in the same city. We see them in person regularly. Now with the video conference calls, I get to visit every Sunday with my mom at her home in Saskatchewan. It's great! Any other day of the week is

too hectic in our house to arrange a video conference. I look forward to our Sunday calls on the TV. It is nice to have a coffee and visit with mom.”

Through this experience he has learned that the visual component is a benefit, which aids each other’s understanding during a visit and can help to initiate a topic of conversation. He states,

“I have learned that video conferencing is a good thing for my mom. When we talk on the telephone sometimes, I have to remind her who she is talking to, *“This is,---, your son”*. It is a lot less confusing when she sees me. The visual really helped her to understand whom she was talking to. I can also tell how she is. For example, I would comment, *“You look tired mom or your colouring is really good today.”*”

With the “in real-time” video he was also able to spontaneously mention various things he happen to notice, for example, his mom’s new hair cut on one occasion and her new necklace another time. Both observations generated a story from Rose. He highlights, “I have seen the anticipation and excitement that our video calls create. The visual is A+.”

The technical setup, was in his view “straight forward” and the technical problems resolved once the machine was replaced. “The system is running really well now with clearer sound, no buzzing, and the picture, well it’s always been good.”

In summary Rose’s son states, “The video conferencing experience has been all around positive. I thought it was the neatest thing when it first started and still do. I will miss it if or when it is gone.”

On the topic of sustainability of the video conferencing Rose’s son made the following comments:

“I would like to continue video conferencing.”

“I would consider buying equipment for my home.” (Retail cost for this particular equipment at the time was \$200-250)

“We live paycheck to paycheck but I would pay that (\$200) plus more to take one trip to Mom’s. With this equipment setup I can see mom and visit every

Sunday, where as I can't drive to Mom's every weekend." He works two jobs seven days a week.

"If families are responsible to maintain the high speed internet line at the long-term care home (\$23-\$50/month) then we will do our share. Perhaps we could split the cost amongst all the users. It is worth it to talk to mom. It's like going for coffee. It would cost a couple of bucks a call. I can have my coffee at home while I visit with mom."

5.2.3. Cluster 2 Overview: Timeline, Frequency and Technical Aspects

Reacquainting Visits

First Video Conference Call: February 28, 2006 with her son in Manitoba

From End of February to the End of May

of calls completed: 7 including one on Mother's Day

of calls cancelled: 2 - volunteer not available

of calls cut short: 1- technical problem

Technical

- Throughout January the video conferencing equipment was made available to another family member but setup did not materialize so other family members were contacted and the equipment was redirected to Rose's son in Manitoba the third week in February. He had highspeed internet and was interested in participating.
- March 19, 2006 - major technical problem at the far location. Camera from Manitoba returned, a new one shipped to Manitoba. Next call not until April 29.

Frequency of calls: Every Sunday at 6:30

Ranged from 30 minutes – 1 hour, 45 minutes

5.3. CLUSTER 3: Introductions

- **Resident Participant:** Katherine has lived at the long-term care home for three years. She grew up in rural Saskatchewan with one younger sister and has lived in the city for many years. She used to do a lot of handicrafts but no longer has the finger dexterity. Now she enjoys people watching and watches a lot of TV. Her favourite show is the Young and Restless. Katherine is a single woman who loves cats and children. On her wrist she wears a beautiful silver bracelet, which has small photos of her family all around it. Most of her family now lives in British Columbia. Growing up, her family would take the train out to British Columbia at Christmas time to visit her grandma. The last time she was there was decades ago. It is very difficult for her to travel. She rarely leaves the long-term care home, except on Sundays when she takes the bus to church. Katherine is eager to see her niece's children and the arrival of a newborn baby.
- **Video Communicants:** Married with twin girls about 18 months old, Katherine's niece and her husband are expecting their third child due in March (arrived April, 2006). They live in British Columbia and both work full-time outside the home.
- **Local Family:** Her mother who visits her usually on Saturdays at the long-term care home chose not to participate in this study.
- **Volunteer:** I visited with Katherine during recruitment and throughout the technical setup phase. It was assumed that once everything was set up technically at the far location then one of the student volunteers who attended the technical support training workshop would assist Katherine during her video conferences. That never happened.

To find out what happened stay tuned: The Young and Restless, Katherine's story is next.

5.3.1. The Young and the Restless: Katherine's Story (Cluster 3)

There were many delays in the process due to the video communicant's busy schedule and some technical difficulties in the setup. The researcher suspects more technical support was required

but the video communicants were non responsive. What happened? The niece quickly expressed a keen interest in being part of the study when informed about it in December. In early January the researcher contacted Katherine's niece to verify consent to participate. Katherine was eager to participate and cognizant that the study was for a short time 3-4 months with a very limited number of participants. Katherine contacted me numerous times in January to see how the project was going and made particular inquiries about progress with her family. What was the hold up? To proceed, a written consent form from the family needed to be mailed to the researcher along with a deposit for the equipment (a cheque for \$70 refundable with the return of equipment at the end of the study). The required papers from Katherine's family were received the last day in January.

With great anticipation that Katherine would be able to see the young twins, her pregnant niece and that the video conferencing would be set up in time for the arrival of the new born baby in April, I rushed equipment to her family in British Columbia. They received it the first week in February. The following week the family indicated they had some problem with the setup but they were working on it. I sent follow up information for technical troubleshooting and indicated they could phone me to work through the setup. In the next four months the family video communicants did not respond to my messages (telephone and e-mail) inquiring about their technical status and offers to assist. Katherine also sent her niece e-mail and talked to her and her mother (Katherine's sister) on the telephone to find out how the pregnancy was going and inquire about the video conferencing. The family indicated to Katherine that they had some technical problems. In early April she received word that her niece delivered a healthy baby girl. In May she received photos of the family including the twins and the newborn baby. Katherine is still waiting for their first video conference experience together.

5.3.2. Katherine's Family Response

At the end of the study (the third week in May), the researcher finally received an e-mail response from her niece, which indicted that she was simply too busy with her young family and work. She could not take on or handle any more, "I seem able to do only so much". She

apologized for her families' minimal participation and suggested that it was simply poor timing given the reality of her situation/circumstance. There was no mention of technical difficulties.

5.3.3. Issues Raised

The situation in Cluster 3 reflects multiple realities and perspectives; it is not clear-cut. A few issues such as timing, technical support and preferred communications are raised and discussed below.

- **Timing:** Was this simply a case of bad timing for the family? From Katherine's perspective the video conferencing, which would provide the opportunity to see and interact with her niece's young growing family, couldn't have come at a better time. Granted the niece's hands are full at this time - with a newborn baby, two toddlers, raising a family and work with no maternity leave. She is perhaps sleep deprived with a number of people and things demanding her attention. Then again other family issues could have contributed to this outcome.
- **Technical Support:** Prior to starting the project, setup at the far location was identified as an anticipated challenge. How much time and expertise were/are required to get set up initially? The amount of time is in part dependent on the individual's existing technical setup at home (i.e. whether or not a router is involved), technical know how and support. Given Cluster 3's unsuccessful video conference connection, I wonder, would the outcome be different if the first time the family turned on the equipment it immediately worked, would they have used it and how regularly? What could I have done differently? At some point it needs to be acknowledged that there is only so much the researcher, a volunteer and/or the long-term care staff can do to make the video conferencing possible for the residents and their families. Families at the far location have to also be very committed and willing to invest some time for initial setup in order to make it happen. Further consideration could be given to identify ways to generate more technical support for the far location, specifically during initial setup. The situation highlights a need to recruit and have readily available more technical support personal.
- **Making Connections - Communication Options and Preferences:** Perhaps there was a disconnect between the communication preference of the resident and the family member

she was trying to set up a video conference with. It is important to acknowledge that the niece has and continues to make efforts to keep in contact with Katherine using other means of communication. They have talked on the phone. The children, however, are obviously too young to interact with Katherine on the phone. The niece continues to send photos of the family, particularly the children. Katherine proudly shows the photos to me when we visit together at the long-term care home. When I asked her how she feels about the incomplete video conference connection she softly responded, “That’s the way it is. We have to just let it be.”

I did not know Katherine when this study first started. In the past six months I have enjoyed getting to know her while talking over a Dr. Pepper. She not only updated me on a favourite soap opera I used to watch regularly, I felt a connection with her through her beverage of choice, our love of family pets, and memories of trips to Grandma’s. My youngest daughter is also fond of her and asks, “When will we visit the nice lady with the cats in her room?” While my daughters and I have enjoyed spending time with her I know deep down that she would prefer to be visiting face-to-face with her family.

Evidently this video conferencing study did not result in a positive video conference experience for all participants. I suggest future resident participants be cautioned/prepared for a situation like Katherine’s where the video communicants do not or are unable to follow through with a video conference, for whatever reasons.

Participants have emphasized the live visual aspect offered through video conferencing as an extremely positive attribute. One cautionary note in this regard relates to negative body image. It was brought to my attention following an incident during volunteer training. During the training workshop, a resident volunteer assisted by participating in practice video conferences placed between his room and the volunteers, in the quiet room. When he appeared on the TV screen I noticed his welcoming smile and calm fun loving nature as he joked and conversed with the video conference volunteers. As the picture and sound were adjusted, someone made a casual comment that the resident volunteer was slouching; he should move to be more centred on the screen. This comment in conjunction with the sight of himself on TV accentuated an upsetting

negative body image. At the time the resident volunteer did not say anything but after the workshop he revealed to me, “Today, I saw the mere shell of the man who used to stand 6 feet tall. I saw the remains of a debilitating, dreadful disease.” He continued as a volunteer for this project and as discussed later is able to feel good about his contributes to make this service available to residents and their distant family. Information about the volunteers is provided in the next section.

5.4. Volunteers

As noted in the chapter introduction, a volunteer was included within each of the clusters as part of the support structure for this video conferencing exploration. Like some previous projects involving long-term care residents, a relational model of service was employed, thus a positive relationship was encouraged and anticipated to develop between the volunteer and resident participant. Volunteers were deemed to be a critical component to this study from a learning perspective and in the provision of video conferencing service. It was acknowledged at the beginning of the study and is reinforced by resident and family comments discussed in this section that maintaining a base of volunteers for technical support during video conferencing events is important. This volunteer section, divided into four parts, provides information about: the process followed to recruit and train volunteers, feedback on the volunteer support structure from residents and family members gathered from final interviews, the volunteers’ perspective/response to their involvement in the video conferencing experience, followed by a discussion on encountered volunteer challenges.

5.4.1. Recruitment and Duties

Trained volunteers were required to assist resident participants during a video conference and as discovered very early on in this project, technical support volunteers are also needed to assist families in the initial setup phase. During each video conference, once the call was initiated and technical adjustments made (i.e. volume, picture focused) the resident and the video communicant were given some privacy. The volunteer stayed in close proximity to the room so if help was needed she could quickly go back in to give support. After each video conference, the

volunteer also assisted the resident participant to maintain a memory log of their video conference experience.

The Director of Volunteers and Global Events at the long-term care home recruited five volunteers to assist resident participants. As the researcher, I provided a one-hour training workshop to prepare volunteers to give technical support to resident participants during a video conference call. Procedures included: turn on/off equipment, initiate and end a call, adjust volume, focus picture, trouble shooting and reporting technical problems. Nine people attended the training workshop: Five university practicum students from the College of Pharmacy, three staff from the long-term care home's Volunteer Department and one resident volunteer. Four of the five students were very positive about the equipment and the pending experience.

For Cluster 2, a family member was later trained as a video conference volunteer to assist Rose, the resident participant, in part because agreements were made that the researcher would be the only other volunteer involved for Cluster 2. Due to a change in his work schedule and a job injury he was unavailable to assist the last two months. One particular student volunteer consistently assisted John from Cluster 1. The volunteer department staff did not participate in any of the video conference calls made during this study. This may be in part due to the fact that most video conferences were in the evening or on weekends thus, not during regular work hours for this department. However, the Director of Volunteers worked closely with me, throughout the project, scheduling volunteers, trouble shooting, and promoting the project.

I recruited two resident volunteers to enable a two-way video conferencing process within the long-term care home, and one technical support volunteer to assist families with initial installation and testing of equipment at the far location. One resident volunteer assisted with the training workshop and provided on-going support during the project. This resident's room was located next to the quiet room where the video conferencing equipment was set up for resident participants. The other resident volunteer agreed to help at the end of the study to provide demonstrations within the long-term care home. Both of these residents have highspeed internet in their rooms and voluntarily agreed to have the video conferencing equipment temporarily set up in their private rooms for workshop and demo purposes. Their neighbourly actions provided

other residents and staff the opportunity to see, experience and understand what this kind of video conferencing entails.

5.4.2. Resident and Family's Response to Volunteers

Resident participants, local family members, and family video communicants were very appreciative and approving of the volunteers' assistance. Their comments show various ways in which the structured volunteer support was significant.

For example Rose's son in Manitoba commented, "It was good to have a volunteer there for the calls. I don't think mom could do it on her own." Rose evidently agrees with her son. An incident described in Rose's memory log stands as a reminder of the importance that a volunteer be present during a call.

"A staff person wheeled me in to the quiet room to wait for my video conference. I sat in front of the TV, which was turned off. The volunteer arrived after me to assist with the call. I was really glad to see her because I wasn't sure what to do with the equipment by myself." - Sunday April 29, 2006

As the volunteer that day, I recall the sense of relief, which Rose expressed upon my arrival. Although Rose indicated she had not been waiting long, it was evident that while sitting alone, looking at the black TV screen, she grew anxious and uncomfortable at the thought she may be left on her own to make the call. (Note, I usually brought Rose to the video conferencing room and turned on the equipment. I was not able to verify whether in anticipation and excitement Rose asked the staff person to take her to this room or the staff initiated taking Rose to the video conferencing room that day. The scheduled video conference was posted on the daily schedule in the staff room, as was procedure.)

It is debatable to what extent Rose could operate the equipment independently. But also not the purpose or main focus for this study! The point is Rose was able to experience a video conference; she had access to the equipment and assistance was readily available. The provided

volunteer assistance enabled her to comfortably participate in a very individualized activity: a face-to-face visit with her family.

From Cluster 1, John's sister in BC responded very positively to the support provided by the volunteers. She states,

“Our family worked with two volunteers. Both were very positive and accommodating. It was reassuring to have them there for my brother and mom to assist, for example, when the microphone fell. Appreciation and thanks go out to them for flexibility in their schedule, being available on holidays which meant a lot, and doing things above and beyond the technical support.”

John's sister in Ontario agreed that the volunteers were helpful and reassured the family. She adds,

“I imagine how horrible it would be if something went wrong, if physically something happened, like he fell out of his wheelchair trying to pick up the fallen microphone. To see that, and not to be able to help would be awful, worse than if on the phone.”

Her comment is a reminder of the physical needs of some residents as well as safety precautions that are addressed by having a volunteer present. Volunteer presence contributed to a positive video conference experience for participants in both Cluster 1 and Cluster 2. Volunteers made and can help to make the atmosphere during a video conference more relaxed for the residents and their families. The volunteer can also take the pressure off local family members who otherwise may be responsible to provide the technical support during a call.

5.4.3. Volunteers' Response to Experience

Information for this section was obtained through a written survey at the end of the study (see Appendix D). As anticipated, the volunteer experience was positive. A mutual friendly connection developed between the volunteer, resident, and family. Along with an understanding of a long-term care resident's situation, the volunteer(s) learned technical skills. John's volunteer said,

“I found this to be a rewarding experience. When John asked my help in video conferencing with his sisters who live out of province, I felt privileged to be part of the experience and was glad that he felt comfortable enough with me to request my help.”

Before the project, this volunteer was aware that video conferencing existed, and had heard of speaking over the computer on webcams but she never actually had any previous experience with video conferencing. She admits, “I came into this experience a little apprehensive about my abilities to work the video conferencing machine but everything worked out really well and it was a fun learning experience.” At the end of the study, she felt the chosen equipment for this project (D-Link’s i2eye DVC-1000) worked well because “it could be hooked up to the TV screen rather than computer thus, residents and their family had a better ‘view’ of each other.” She felt she had received enough training and through her volunteer experience gained confidence: “I gained some new technical skills as well as confidence in working in areas that I have never before been involved in.” The areas she referred to were volunteering in a long-term care home and assisting with video conferences. More important than the technical skills gained, this volunteer describes a positive connection with John developed through time spent together. Her eagerness to continue to volunteer suggests she feels a positive connect with John. “Through my volunteer experience I have become part of John’s life, assisting him with things that he would not normally be able to do like baking, video conferencing, and outings away from the home. I would like to continue interacting with him after the practicum time is up.” Through her involvement with this project specifically, she has also gained an appreciation and better understanding of what video conferencing means to a long-term care resident. “It’s great especially for residents in care facilities, who do not often get a chance to visit their family in other parts of the country, to interact on a more personal basis than the telephone.”

5.4.4. Volunteer Challenges and Recommendations

The volunteer from Cluster 1 highlighted, “I liked that I was able to help John connect with his family. I found that the hours that I came in for the conferences always worked well with both mine and John’s schedules.” However, this was not the case for other trained volunteers, a change in the project’s timeline created some challenges to volunteer availability and scheduling

of video conferences. Volunteers were trained at the beginning of December. The Interactions Face-to-face Video Conference project was scheduled to be completed at the end of March, the same time as the Pharmacy students (the majority of my trained volunteers) were to have fulfilled their designated 60 hours of volunteer time for their service learning practicum. When volunteers were requested for scheduled calls at the end of February and March the times conflicted with their scheduled University exams. Due to delays in the setup phase for Cluster 2 and Cluster 3, the video conference project continued into April and May. Unfortunately, the five trained volunteers - university practicum students, were not available. I, the researcher, assumed the role of volunteer for all calls in the last two months. When I was unavailable, calls were cancelled. From this situation the following recommendations are made pertaining to sustainability:

- Recruitment and training of volunteers should be on-going
- Need volunteers and/or staff available to assist on weekends, evenings, and holidays. These are the key times residents and their families requested video conferences.
- Technical support for setup at the far location is required either by IT staff or volunteers with appropriate IT skills

5.5. Participants' Concerns and Suggestions for Sustainability

In summarising the experience of the three clusters, a few points are made about sustainability and future applications. Sustainability issues are also further discussed in Section 6.7.

All three residents as well as the family members who actually participated in video conferences with them want video conferencing to continue. They deemed the volunteer support critical to its successful implementation and the relaxed, comfortable feeling during TVcalls and Reacquainting visits. Based on this video conferencing experience John's sister made the following two suggestions for further applications. Her comments highlight attributes of video conferencing; live visual interaction.

- **Meetings with Resident’s Care staff Team:** “I had no previous experience with video conferencing or web conferencing but had an *audio conference/teleconference* with the long-term care staff just before you approached us about getting involved with this project. It involved the whole care Team, my mom and brother - more than eight people. It was exhausting and difficult to keep track of who was speaking, while at the same time try to solve issues raised during the meeting. I didn’t have the visual clues to help guide me and provide me more information/insight to the situation. Given my experience with the audio conference and the video conferencing with my family, I can now see how useful video conferencing would be to family who need to meet with a resident’s care staff team.”- John’s Sister in Ontario
- **Expand to include other family members:** “Another scenario where it would be nice to have video conferencing set up: my niece in Winnipeg just had a baby. It would be nice to include my brother and my mom more. To travel, my brother is very limited due to the level of care he requires. The video conferencing is a way for him to adapt to being more restricted. *My sister has shown both my brother and mom photographs of the newborn baby on the computer in the computer lab at the long-term care home. They are good photos but to see and have a live visit, interact with my niece and the newborn baby, and to see them in their home setting and any of the spontaneous moments that happen during that interaction; the video conference provides a different experience: an enhanced - interactive experience*” – John’s Sister in Ontario.

Three concerns/issues raised were:

- **Staff Awareness/Involvement** - Staff awareness and involvement was limited. But if interested staff were to get involved, for example, take on duties that were handled by the volunteers in this study, it would provide staff an opportunity to learn with the resident(s), about the resident as well as become more acquainted with the resident’s family. Staff would see first hand what video conferencing means to an individual resident and her/his family.
- **Privacy** - The equipment was set up in a room resembling a living room/family room. Privacy was identified as an issue very early on because there was no door to close off

the area when visits were in process. A curtain was put up and a sign posted during video conferencing events and the volunteer also stood in the hallway ensuring no one entered the room. Family, indicated a room with a door as preferable and a posted sign for privacy or set up equipment in a designated meeting room. In this respect comfort and atmosphere must be given further consideration.

- **Cost** - A recurring issue that needs to be addressed in conjunction with any sustainability efforts is cost.

Will only those with money be afforded the opportunity to stay connected with their family via video conferencing? How can video conferencing be made available to long-term care residents and their family regardless of their income/financial situation? If a picture/photograph is worth a thousand words, how much is a technology enhanced face-to-face interaction worth? In the words of family participants the time spent together is “priceless”, and “precious” particularly when you live more than 500 miles away from the long-term care home. “It is the next best thing to being in person.”

CHAPTER 6 - CLOSER TO HOME: DISCUSSION AND CONCLUSIONS

Recall the purpose of this study was to understand the value of technology enhanced face-to-face interaction in the context of a long-term care home. How does video conferencing with family in a long-term care setting with the given structure relate to residents' quality of life? And what was the impact on family, and volunteers? One of the goals of the Interactions Face-to-Face initiative was to set up video conferencing for long-term care residents to explore it. It was deemed a compassionate response to loneliness, helplessness, and boredom, which are documented to be serious problems associated with nursing homes and perceived low quality of life. From the participants response to their video conferencing experience offered through this study, I conclude that a video conferencing service/program if set up like this four month exploration, that is, with a strong volunteer and intergenerational component, (as well as staff support) focused on an informal learning environment and encouraging more face-to-face interactions, then through the multitude of social interactions loneliness, helplessness, and boredom will be addressed, connections will be made, positively affecting change.

Consider the findings as discussed in this chapter. They have emerged through thematic analysis of the collected data, from multiple in depth interviews, memory logs, and my observational journal, which pointed out issues as they arose during the process and reoccurring themes. Keep in mind concerted efforts were made to develop a trusting relationship with participants, Thus questions were asked as part of conversational, mutual exchange that allowed participants to take the role of "story teller" and to present their experiences in the form of narratives. Transcripts from residents' interviews were read and re-read in their entirety, and themes identified and cross analyses by reviewing residents reflections in their memory logs. The same process was followed with family interviews. Note, all interview transcripts were reviewed and verified by the participants and opportunities were available to clarify issues raised in the interviews, by telephone, e-mail, and in person. For example with residents, I reviewed the transcript with them

in person, in John's case his mother was present during the reviews, discussed any changes they requested, then left a copy with them, and followed up with an additional in-person visit. This process has enhanced the credibility of the data and the development of emerging patterns and thematic categories. This chapter discusses the findings, sustainability of this project and areas for further study.

6.1. Increased Face-to-face Interaction

Findings of this study indicate video conferencing enabled increased face-to-face interaction in the following ways.

Between family – Rather than every four years Rose saw and visited with her son and his family every Sunday. John's sisters who make it home usually once or twice a year to visit in-person were able to visit both he and his mom face-to-face every 1-2 weeks. Thus video conferencing has enabled family to take on a regular visitor role. Note, young children, Rose's great grandchildren, experienced a video conference visit with Rose and the family pets (viewed by some as family members) took part in some of the visits John had with his family.

Between volunteer and resident(s) – Before the conferences and after there were opportunities for the assisting volunteer to visit. In Katherine's case, I worked with her as the volunteer and researcher to get video conferencing set up with her family. Our efforts would appear at first glance to be unsuccessful but a closer look would reveal that from our conversations over Dr. Pepper, a relationship has begun to form between us.

When a video conference was in process, the volunteer would stay in the hallway, and often times visit with other residents. Some she approached and others approached her. At first it was simply casual greetings and niceties but has evolved into conversations of more substance. From an educational gerontology perspective, providing opportunities for residents to talk is important. (Jarvis, 2001) These conversations developed the volunteer's awareness of the variety of people who are living in this facility.

Amongst the residents – This video conference exploration provided and may continue to provide something for the residents to talk about. For example, both Rose and John casually discussed their video conferencing experience with residents they met in the hallway, and at the dining room table before and after conferences. At the end of the study a resident who was not a participant approached the resident volunteer to find out more about this so-called video conferencing, which she had heard about from a friend. Upset that she had not been approached to be part of the study, yet excited about the possibility of seeing her grandchildren, she eagerly pursues video conference set up with her family. This situation reminds me of John's response to one resident's inquiry, "If I can do it, you can do it." He was referring to the simplicity of the TVcall/video conference process. He makes a valid point if one resident can do it another resident can and should also be given the opportunity.

On one particular occasion following a video conference, a resident noted of the participant, "The video call must really make a difference. She actually smiled, said hello, and waved at me. Did you see that?" The comment suggested a positive change in the resident participant's demeanour and a positive interaction between these two residents.

Thus video conferencing has provided an opportunity for relationship building between residents, volunteers and residents, and most significant maintaining contact with family, which the resident and family participants indicated was important to them. Increased positive social interactions are assumed to guard against and/or alleviate feelings of loneliness, helplessness, and boredom, thus positively effecting residents' quality of life. (Thomas, 1996, 2003) Increased family involvement in particular is assumed to positively affect quality of life. (Gaugler, 2005) However, a simple increase in the number of interactions will not necessarily alleviate these serious problems. One must also consider the type and quality of interactions.

6.2. Intergenerational Component

The intergenerational component focuses on inclusion and fosters relationships. Before the project started it was anticipated that the intergenerational component and connection would come from within the family as well as between resident participants and volunteers. What

wasn't anticipated but also materialized was an intergenerational mix amongst the residents involved, a mere reflection of the long-term care population. Not only was the video conference exploration enjoyed by an older and a younger resident as a means to connect with family younger and older, far away and locally, but it also turned out to be enjoyable and helpful to elderly local family. Participants including volunteers indicated it was a positive learning experience. One commented, "It was very enjoyable. However, it was a particularly steep learning curve in the beginning with setup and the first few video conferences. I feel comfortable with procedures now." Like previous programs (mentioned in Chapter 2), there was a positive response from residents, family, and volunteers regarding the intergenerational component. Not only did they learn about each other but the technology was new to them all. The volunteers were learning and gaining confidence with how to use the video conferencing technology at the same time as the resident and family participants were. Thus, it is an example of intergenerational learning with an emphasis on learning together.

6.2.1. Why is the Intergenerational Component Important?

Gerontological Education for a caring society requires an intergenerational component. Radcliffe (1985) on the topic of intergenerational contact and social consciousness states, "When direct intergenerational contact is limited, social consciousness is formed by the stereotypes projected in the press and popular literature, in television, and today above all in commercial advertising." (p.183) Similarly, on the subject of education about ageing and consciousness-raising Glenndening (1985) writes,

"To counter ageism, it is necessary to mount an education and information-giving programme which can begin to present the positive potential of older people rather than to dwell on the 'geriatric model' with its deficits and decrements and inevitable decline.... It is necessary to engage systematically in consciousness-raising, which will lead to an inter-generational approach to the quality of life of contemporary older people, as well as those of future generations." (pp. 36-37)

The Interactions Face-to-Face video conferencing initiative is one way to engage in consciousness-raising. In addition, from a learning perspective, Coppard (1981) responds,

“Probably one of the best ways to help children understand the essence of lifelong learning and at the same time provide a meaningful way for elderly people to contribute to their community is through intergenerational learning opportunities or what Howard McClusky called “the community of generations.” (p.113)

Coppard gives the example of grandparent program at school but a video conferencing initiative like Interactions Face- to-Face could do the same. In these activities, young and old are learning together from each other about something that is important. They give younger people a chance to see elderly people as creative inquisitive learners and opportunity for elderly to contribute.

6.2.2. Challenges Relating to Intergenerational Component

Ironically, the competing demands of a busy young family were a major challenge to setting up the intergenerational interaction via video conference, in Cluster 3. Maintaining university student volunteers (in this case pharmacy students) was also a challenge to this project, primarily due to a change in project timeline and family participants’ requested video conference times, which tended to conflict with students’ regularly scheduled exam times. And finally, a challenge to education students: Although I do not know if it is indicative of most long-term care homes/facilities, it was my observation that there was a large representation of university student volunteers from health and social work fields but very few volunteers from College of Education. I challenge education students, future teachers/facilitators, to get more involved as it relates to viewing aging realistically,

“When educators view aging realistically and positively, lifelong learning, takes on greater social importance and becomes a means of helping elderly people to be involved with the world around them. Lifelong learning in this sense can be a way of developing what Freire calls “critical consciousness”: the understanding of one’s world that is essential to the process of learning, change and the humanization of society.

When lifelong learning has this purpose it can help elderly people to continue to grow, to help them develop the understanding and confidence to participate in society, and to work for change. It can encourage them to join with other people to create places in society where people in their later years can continue to make a contribution. In so doing, the elderly person derives

substantial benefits but in the final analysis society as a whole is the real beneficiary. (p.114, Coppard, 1981)

6.3. Companionship and Belonging: Alleviating Loneliness

I never asked the three residents if they were lonely. Many older people experiencing loneliness or isolation are unwilling to talk about it because such an acknowledgement challenges their identity as independent people (Russell, 1999). However, in the interviews focused on life in the long-term care home John emphasized it was important that he have a girlfriend here, “I wanted to have someone to share things with otherwise I might get lonely here.” He was excited that in his house there was talk of adopting a dog. The staff sometimes bring in their pets but he notes, “Its not the same as having your own.” He fondly recalled the dog he had growing up.

Katherine who grew up surrounded by family pets tells humorous stories of cats in this long-term care home. She also talks of interactions with the on-site daycare children. Unfortunately, a change in her schedule means that she is not helped out of bed until later in the morning. So she often misses the children’s visits and activities in her long-term care neighbourhood. Katherine was grateful for the loyal friend from her old apartment complex that faithfully visits her every Monday.

Rose regularly sits by her windowsill that is filled with plants she tends. Occasionally she mentioned a dear friend and fellow resident. She loved playing trivia games when he was around. His picture is on the wall next to her bed. “He was very intelligent. I miss him a lot. We will have a date in heaven,” she says.

Evidently, the residents are dealing with losses and change. As a means of companionship efforts are being made, within this long-term care home, to provide access to pets, plants, and children.

Video conferencing provided two of the three resident participants increased access to family that do not live close to the long-term care home. How close did residents feel to their family during a video conference is an important consideration discussed below.

6.3.1. Telepresence: How Close Do They Feel?

Shin (2002) defines transactional presence/telepresence as the degree to which a distance student perceives the availability of, and connectedness with, other parties involved in a distance education setting. The assumption is that feelings of availability and closeness/connectedness are important in a learning environment. Put in the context of my study, transactional presence or telepresence is the degree to which a long-term care resident perceives the availability of and connectedness with the family members (video communicants) involved in the video conference, an informal distance learning setting. My hypothesis was that the visual component of video conferencing that enables face-to-face interaction also creates a greater sense of presence-connectedness. Comments from participants imply that there was a high degree of telepresence. Rose's memory log entry expresses her amazement and excitement at how close she felt:

“This was my first video conference. I couldn't believe it when they came on the television. It was better than the telephone. I could practically feel him. He looks so handsome. It was a thrill.”

Connectedness and closeness are also strongly suggested by the name Rose chose to give video conferencing. Not only did she call it “Reacquainting visits”, she stated it was “the closest I have been to my son in a long time”. John and his family previously telephoned each other regularly but John indicated a feeling of “being around family” more with video conferencing than telephone interactions. One of his sisters stated each experience was “like getting together for tea”, which also hints at connection and closeness. While the beverage of choice was coffee for Rose and her son, it felt like her family was beside her, “like they are in my living room, sitting next to me. I could almost touch them.” Consequently their comments denote a comfortable atmosphere, evoking more of the senses than telephone. At the end of the study, one of John's sisters said, “I feel attached to the video conferencing visits” and admitted she did not anticipate feeling this way. John and his family made no reference to the absence of touch but

Rose occasionally felt it. The actual physical distance separating her from her family was recognizable when she wanted to hug her children and grandchild but had to blow kisses instead. The video conferencing creates a new form of family presence but it is not a replacement for in-person visits. Evidently video conferencing is an exciting way to keep in touch but it is unable to stimulate the sense of touch, which is also an importance means of communication as Nussbaum et al. (1989) point out in their book *Communication and Aging*.

6.4. Reciprocity and Opportunities to Help: Alleviating Helplessness

Doing things for residents that they can still do for themselves creates helplessness. The video conferencing focused in on resident participants' strength and preference to communicate verbally. Volunteers may have helped to turn on and off the equipment but residents spoke and immediately saw for themselves responses from family and the impact of video conferencing. This new form of communication and the exploration of it provided residents the opportunity to give care, family and volunteers the chance to receive care.

From the very beginning John stated the video conferencing was his gift to his family. Via TVcalls they received and gave comfort and joy to one another through conversation and visual presences on special holidays (i.e. Christmas) and ordinary days. Through Rose's years of work experience and expertise as a professional portrait photographer, she enhanced this video conference exploration. For example, Rose instinctively assessed how the lighting in the room needed to be adjusted and repositioned family members for a better view on the screen, so that in her words, "It was picture perfect!" To acknowledge the wealth of experience she, and other participants, bring to this learning situation, and such reciprocity of learning follows Adult learning principles pioneered by Malcolm Knowles, specifically learning in later life (Jarvis, 2001; Mackeracher, 1998), as well as qualitative research characteristics (Lincoln 1995, 1998). The assumption from an Adult Education facilitators perspective, is that the participants (learners) have something to teach/give as well as learn. Similarly, Vanier (2003) states "I have learned that the process of teaching and learning, of communication, involves movement, back and forth: the one who is healed and the one who is healing constantly change places." (p.25) Thus, reciprocity is part of the process.

Through face-to-face interactions residents related to volunteers and gave volunteers a clearer picture of individuals living in a long-term care setting. Initial thoughts and outcomes of these interactions were significant, as one volunteer's response to her service learning experience indicates:

“I have been able to get over certain stereotypical views that I didn't even realize I had. At first I worried that I would not be able to relate to this resident at all. However, I soon realized that he is a very interactive interesting individual with whom I can easily converse with and joke around with. Working with John has helped me to realize that although a person may appear physically or mentally different from the “norm” they are still very important people who have a great deal to contribute.”

Granted other types of volunteer experience within a long-term care setting could achieve this outcome, but few can boast to contribute to connecting residents with family in the process as the video conference volunteer experience can.

For me this experience is the realization of our interrelatedness. Whenever I came to visit or assist with a video conference Rose was appreciative and I was happy to be there because we lifted each other's spirits. Often when I arrived I held her soft hand, she warmed mine. Whenever it was time for me to leave we hugged, Rose would give me a kiss on the cheek and say “I love you!”, occasionally she'd say, “You're a very good person”. I always left her place feeling good about myself. Her enthusiasm for the video conferencing initiative, and kind optimistic words gave me confidence. It makes me smile when I recall Rose's spontaneous comment midway through her first taped interview:

“Well Sherry. I am really glad you are able to do this video transfer from Manitoba to here and probably all over the world via TV. (Rose leans in to the microphone and looks straight towards the black TV screen, which I happen to be sitting beside.) For anyone watching this or listening, pay attention to what Sherry is doing. She is going to change the world. I mean it, it is wonderful,” she said with conviction.

“Thank you Rose. I am thankful to have the opportunity to finally share this experience of video conferencing with you. And over the past three years I

have enjoyed spending time with you visiting, learning, and playing in the computer room.”

“Me too. The feeling goes both ways.”

Care is about feelings and actions. *Gentle teaching* which is based on a psychology of human interdependence (see website Gentleteaching.com) and focuses on being kind, nurturing, and loving toward marginalized children and adults indicates four essential feelings that need to be taught to those who are served - the fourth, human engagement is exemplified in the video conference exploration. Human engagement is made up of 3 basic feelings: (1) it is good to be with one another; (2) it is good to do things with one another; and (3) it is good to do things for one another.

During this video conferencing exploration, there were many times when help was required and received. One particular resident, who embraces information and communication technology helped advance this project by providing assistance with the volunteer training workshop, temporary additional internet access from his room, and emergency support to participants. Even though this resident volunteer did not video conference with his family, he helped other residents connect with their family. He demonstrated compassion and neighbourliness. His response to the experience, “It feels good. I have gained a good friendship with the researcher and volunteers. And I feel I have made a positive contribution to this place.”

Thus, there was a balance of care; the video conferencing road goes in many directions.

6.5. A Stimulating Environment: Alleviating Boredom

To ward off boredom Katherine watches people. She indicated, “I like to go to the front entrance and watch all the people coming and going, the visitors the staff. Some bring their dogs, big and small. Sometimes they stop to chat. Some are in a hurry.” She is stimulated by the variety of people she sees. Rose and John are also stimulated by the people that they see, their family, each time they video conference. In what way(s) did video conferencing create variety and spontaneity in the environment?

6.5.1. Response to Variety

In this study video conferencing equipment was added to the physical environment of the long-term care home, the goal, to provide an alternative means for residents to connect/stay connected with family and friends who do not live close to the long-term care home. Video conferencing is a form of communication just as writing letters (snail mail, or e-mail) and telephoning may be options for some residents, but it has the added visual feature which participants indicated enhanced the social interaction and overall experience. Video conferencing provided resident participants a change of scenery, different people to talk to other than staff and residents, while providing participants something new to talk about with staff and residents. Although it was not available on a daily basis, it added variation within the social environment. The regularly scheduled visits were something the residents and family looked forward to. They mused at how quickly time passed during visits. Thus, video conferencing offered a positive sense of time passing and was stimulating. Resident participants and their families never said they were bored by the video conference experience, nor did these three residents state they were bored in this LTC home. Katherine specifically stated the contrary, "I'm not bored, I find things to keep me busy." Granted there are a number of activities offered at this particular long-term care home. But quality of life is not simply the number of things that we have to keep busy but that the activities one does are meaningful.

Findings of my research suggest that the addition of video conferencing into a long-term care setting is consistent with a supportive environment (Kane, 2001). It supports informal care by providing access to family, as well as informal learning within a social context, which is particularly significant for seniors' learning (Jarvis 2001, Mackeracher 1998, Coppard 1981; Clough 1991; Glendenning 1985). Three assumptions were made. First, interaction is key to learning in the Social Context (Jarvis, 2001). Second, learning is embedded in family and informal settings. And third, learning in relation with others is key to optimizing the learning community for seniors.

Anyone who has ever used innovative technology knows situations encountered are not always predictable. For some it can be challenging to the point of frustration. Furr and Ragsdale (2002)

reported lack of technical support and frequent technical problems was the number one source of frustration documented by the students and teachers in five university courses offered by video conference from an American University. However, none of the participants of my study mentioned their experience with this particular video conferencing technology to be frustrating, once past the initial installation. They did make reference to the “steep learning curve” in the beginning and “a sense of accomplishment in the end”. The technical support provided through volunteers was an identified factor affecting their enjoyment of the video conference experience.

6.5.2. Examples of Spontaneity

Unlike Peterson (2007) and Atkinson (1999) who found video technology was a barrier to spontaneity, during this study, many examples were documented where video conferencing enabled not only spontaneity but also numerous learning opportunities in the long-term care setting. Given the informal setting and structure, once the video conference was in process, there was spontaneity in conversation and interactions often spurred on by the visual component of the video conferencing technology. Highlighted are a few examples: (1) A neighbour rang the doorbell in the middle of a video conference, so he was invited to join in the visit. Rose’s response, “That was exciting I would have never met my son’s friend otherwise.”; (2) Curious dogs and a cat also joined in, to the delight of the participants. It was particularly humorous, when a neighbour’s dog barged in through the garden door and raced to sit in front of the TV, seemingly eager to visit and find out more about the so-called TVcall. A few different times the cat that lives in this area of the long-term care home, came down the hallway looked up at but did not read the posted sign “Video conferencing in process please do not disturb.” It proceeded to go under the curtain. And as the cat wondered around in the video conference room in full view of the family, it provided a natural energy to this experience. They were able to see life in this home. (3) The sound of music: While troubleshooting a technical difficulty at a far location (Manitoba), an impromptu violin performance by my grinning six year old daughter in a second far location (at my home) was a pleasant insightful relief. Connected, engrossed in the musical moment. Rose tapped her fingers in time to the music. Rose used to play guitar in a band with her sisters. ; (4) A quick trim: Once when positioned in front of the TV screen, Rose insisted she needed her hair trimmed. With two minutes to go before the scheduled call was to

be connected, I ran back to her room returned with scissors, fixed her bangs, as she requested. “Now there is a person I recognize”, she responded. Within the first few minutes of her video visit with her son he commented how wonderful she looked that day, which made her perk up in her seat. These are just a few examples of incidental learning, spontaneous video conference moments, which the residents, family members, and volunteer recalled.

A final thought. The start time of the calls was not spontaneous. They needed to be scheduled ahead of time in order to coordinate a suitable time for resident, family, and volunteer. If more staff and volunteers were trained and available to assist, it would provide opportunities for residents and family members to spontaneously initiate a video conference visit. This is an important consideration in alleviating boredom. After all, what is more exciting than a surprise visit from a cherished loved one? According to the personal narrative of Kane and West (2005) nothing, “No matter what services were provided by the institutions where Ruth spent the last 3 years of her life, *nothing took the place of visits from family*, particularly her children.” (p.136, italics added)

6.6. A Meaningful Activity

In what ways was video conferencing meaningful, with genuine purpose or function? The language used to describe *meaningless activity* is busy work; it has no meaning for the individual performing the activity, where as meaningful is “that which fulfills a genuine purpose or function.” (Eden Alternative Associate Training manual, 2002) The fact that Rose would come to refer to this process as “Reacquainting Visits” strongly suggests the video conference experience was an extremely purposeful interaction for her. This individualized communicative activity, reconnected her with her son and his family.

“Now as we talk, I just keep thinking of them. They were right here in this room. I think the last time I was at his place their last baby was in a playpen, more than 15 years ago. They haven’t come here since my 80th birthday. This June I’ll be 84. I am looking forward to visiting again with them next Sunday at the same time.”

Video conferencing also fulfills a function for John, as he stated: “I like being around family and learning new things, that’s why I like the video conferencing experience.” John’s comments directly reflect three aspects of quality of life as outlined earlier: *being* (who people are as individuals) - the video conferencing experience/exploration acknowledges John as a person with a family and learning interests; *belonging* - he has a sense of belonging within a family; and *becoming* (learning and adapting) - exploring video conferencing was the opportunity to learn a new way to be with family.

According to a study by Durning (1992), things that people identify as meaningful to their lives when asked to reflect seriously include conversation, family, and education.

“When people are asked to reflect seriously on their lives, it is surprising what they indicate is really important. The preponderance of things that people name are meaningful to their lives are religious practice, conversation, family and community gatherings, theatre, music, dance, literature, sports, poetry, artistic and creative pursuits, education and appreciation of nature.”

(Durning 1992 cited in O’Sullivan 2001, p.236)

While individual participants in my study made reference to various things (i.e. religion, music, creative pursuits), I will focus discussion on three: conversation, family, and education.

Rose used to be involved in a number of programmed activities but at the time of this video conferencing project she was not. As previously mentioned, Rose spends a lot of time in her room looking out the window or at the photos on her wall. Photographs are encouraged in nursing homes for personalization and conversation (Chuck, Milke, & Beck ,2005; Kane & West ,2005). When we talked, I noticed Rose became very animated as she pointed out the weddings, birthdays, her 80th surprise party, along with the talents and unique qualities of individual family members. Photographs of her family comforted and energized her.

Rose’s excitement before a video conference was equally noticeable. A few times when John was using the equipment, just before her scheduled call, Rose drove up and down the hallway, repeatedly commenting, “It’s almost my turn. Don’t let them go overtime”. On two occasions, Rose was asleep at the dining table when I arrived. However, she was aroused, albeit a bit disoriented at first, when I greeted her with the phrase, “Would you like to visit with your son?”

I'm here to assist with the call." Both times, she responded, "Grab a coffee. Let's go!" She was definitely interested and responsive to video conference calls. Video conferences lifted her spirits and nourished her in a way the meals could not.

Whereas photographs are reminders of Rose's history and valued relationships: video conferencing is a chance to reminisce with one of her beloved sons. They marvelled the new way of sharing present time together. Rose emphasized, "We mainly talked about present day happenings and took in the view." Traditionally a family day, her son indicated he looked forward to their video conferences, "I really enjoy getting together for coffee on Sunday with mom." Thus, it was not a meaningless activity for either of them. It was family time renewed.

Among the stories John shared of his life experience, he emphasized, "One thing I miss, what I really miss, is going for coffee with my dad." Visiting with family was and remains important to these residents. Recognizing that John's many "activities" were also important to him, family scheduled TVcalls around his very busy routine. Consequently TVcalls were sometimes scheduled immediately following a group activity. On a few such occasions, John didn't attend the group activity or left early, his explanation: "I didn't want to miss them [his sisters], be late or too tired to visit." His comments indicate he valued TVcalls with family and was eager to visit. At the end of some video conferences, he was admittedly tired but always noted in his journal that the TVcalls were "enjoyable" and he was "happy to see his sisters".

This study illustrates frequency of contact can increase and nature of contact change given access to video conferencing. This technology enables family members who live far away to take on a "regular visitor" role, which is significant as research suggests that continued, valued family involvement can be beneficial to both residents and the family (i.e. higher morale, more attention from the staff, and improvements in emotional well-being). (p.95, Gladstone, Dupuis, & Wexler, 2006) Video conferencing functioned as the meeting place, a gathering space, a living room or family room. This is another important function, as discussed earlier in chapter three, a common challenge for long-term care residents is the lack of space: "There is little personal space in the nursing home - usually half a room, most of which is filled with a hospital bed." (p.44, Martin 1999) (or as in John's case shared with another resident and my grandmother's case, shared with

two or more residents). Visiting via video conference expanded the residents personal space by enabling them to be in a different place. During video conferencing the residents were able to be in their family's home, away from the long-term care facility. With video conferencing, residents are going visiting.

The individuals who participated in video conferences agree it is enjoyable and beneficial to them. Participants described the experience as “wonderful”, “good”, “pleasant”, “great”, “neat”, “a thrill”, “all around positive.” There was particular emphasis on the significance of the visual component: “the visual is A+”, “invaluable”, “very rewarding”, and “precious”. According to family it aided communication and comprehension, providing different information, and more details than voice cues alone. Residents felt closer to their family during the video conference which is important as John indicated “I like being around family” and Rose specifically stated “seeing them means a lot to me.” These participants’ comments imply that video conferencing enhances their quality of life, given that enjoyment, relationships, individuality, and meaningful activity (help to others inside and outside the nursing home included as a type of meaningful activity) are four identified domains of quality of life (Kane, 2001). And their comments are consistent with findings of quality of life studies in the long-term care context “research evoking the resident voice on the elements of a good quality of life tends to find that residents care about aspects of relationships, activity, stimulation, and security (Abt Associates, Inc., 1996; Cohn & Sugar, 1991; National Citizens’ Coalition for Nursing Home Reform, 1985, cited on p.31 of Kane, 2003).

Naturally, not every resident, family member, or staff will be interested in exploring this technology. They don't have to; the freedom to choose what to do, with whom, relates to quality of life. Nonetheless, video conferencing is one option, which I argue the institution, or Edenizing organization should support, given that respecting and enhancing individuality and individual interests rather than striving for high counts at large organized activities is central to Eden Alternative's concept of meaningful activity (Thomas, 1999). In addition, not everyone is comfortable or well received in a group setting/group activity (e.g., because of inappropriate or offensive behaviour). Video conference, as used in the context of this study, is definitely a personalized activity/experience for a resident which offers the comfort of family and their

unconditional love. Most importantly, video conferencing supports what many indicate is the most important thing in their lives; family and what research indicates is missing in long-term care, positive social interaction; conversation.

Residents' access to video conferencing is in keeping with a person-centred model of care. If considering the infrastructure, who is involved and how, video conferencing, as a personalized interactive activity, is a learning opportunity meaningful on many levels, and has the potential to be meaningful not only in the moment but also long-term. The following section on quality of life education highlights lifelong learning concepts to explain the potential for positive long-term outcomes.

6.6.1. Quality of Life Education

The basic assumption of O'Sullivan's Quality of Life Education is that an education attuned to Quality of Life must be based on the foundation of authentic human needs. Some may say that video conferencing is a luxury - a want not a need. Is being with family a luxury? How does video conferencing in a long-term care context meet human needs? Participants positive response and insights, as discussed, appear to address three of the four basic needs (safety and security, to feel loved and to love, autonomy) we all have, as Martin (1999) explains in his book *Nursing Homes; Easing the Transition for Everyone*. An assumption in this research is that video conferencing is a learning activity. Howard McClusky, a renowned educational gerontologist, identified five categories of human needs, particularly, older adult needs that could be met through participation in learning activities. They are described as follows:

Coping: to find ways of making personal adjustments to economic, social, and physical conditions.

Expressive: to engage in an activity for its own sake as an act of self-expression.

Contributive: to find ways of being useful and needed.

Influence: to find ways of making constructive changes and influencing society.

Transcendence: to rise above one's personal situation and achieve a sense of fulfillment. Learning devoted to this goal enables one to transcend declining physical abilities and diminished life expectancies and experience a sense of fulfillment in the later years.

(McClusky, 1971)

While video conferencing may not fulfill all five of these needs, at least not immediately evident, participants did make reference to video conferencing as a way of coping with social and physical conditions. They also referred to it as a means to be able to express themselves through conversation and non-verbal cues. Keep in mind, both John and Rose indicated it is physically difficult to express themselves through writing (i.e. personal letters). Both expressed an interest in learning; Rose specifically indicated an interest in learning to use modern technology. Regarding contributive needs, video conferencing offered opportunities for reciprocity, which includes giving and receiving care, already discussed with helplessness. Influence, access to this technology influenced the way family choose to communicate with one another. The residents' stories may influence a family member or volunteer in ways not immediately visible, like my conversation with grandma and her shared story had a definite impact on me years later. Learning is imbedded in family interaction. The positive experience which the volunteers experienced with the resident participants may influence how these volunteers interact with other long-term care residents, older people or people with disabilities.

Cough (1991) states and other researchers concur “relevant learning opportunities can influence the social construction of aging and assist in creating more equitable futures for the rapidly increasing numbers of older-old who face a previously uncharted part of the life course and older women facing quadruple jeopardy of being female, old, poor, and isolated. For these older adults, participation in learning activities provides one important strategy for successfully addressing the problems and possibilities of an extended later life.” (Courtney & Long 1987; Cross 1981; Darkenwald & Merrian 1982, cited by Cough p.147)

Education for Community and a Sense of Place is another needed component of quality of life Education, identified by O'Sullivan (1999). This is consistent with the thinking of cultural change initiatives (recall chapter two). O'Sullivan states, “The need for a sense of community and place are particularly wanting in our culture.” (p.244) He attributes mobility of modern life as a major factor contributing to peoples' expressions of displacement. He explains people move to find better jobs and countless hours of our life are spent on highways and in airports. He notes the average North American moves at least ten times in a lifetime. True enough, but what he doesn't mention or reflect on is what happens when the move is to a long-term care home. What

about the accelerated change associated with a move to long-term care and challenges these people face (i.e. loss of personal possessions, autonomy, privacy). Long-term care residents may feel uprooted from home, displaced in a long-term care community/facility/institution. To understand the need for Education for community and a sense of place, as a form of transformative learning or learning for change it is important to discuss mobility in terms of a resident in long-term care. From morning to night, given the processes involved to get up, bath, dress, eat, go to bed, many residents experience daily reminders of their limited mobility. The common place, every day act of a simple trip to the bathroom when the need arises can become a demeaning situation waiting to happen. Countless hours are spent waiting. The residents at this facility have to book transportation a week in advance to get a ride on the Abilities Bus to take them to church, a favourite restaurant, a family's home within the community. Travel is limited.

All three resident participants involved in this study fondly reminisced about trips they took with family to visit family but they are no longer able to travel any great distances due to their physical needs (level 4 care, full lifts, all are in wheel chairs). Video Conferencing is a form of transportation for these residents and their family. John's sister in Ontario articulates, "this form of communication, video conferencing, enables my brother to adapt and cope with his restricted lifestyle." It enables residents to see family members in their home environment, wherever that may be.

A spread out family is a reality for the resident participants of this study with family members spanning across Canada from British Columbia to Ontario. Work takes family physically further away but work schedules and/or paycheques may not permit frequent opportunities for personal long distance travel (i.e. to visit family). This is the situation for Rose's son in Manitoba who works two jobs, seven days a week. He comments, "We live paycheque to paycheque. I can't drive 500 km/miles every week to visit mom." He doesn't have the time or finances. He estimates with the price of gas and over night accommodations, a trip to visit his mom in person costs well over \$200. Does he want to visit with his mom? Yes! Is video conferencing meaningful? Yes!

6.7. Sustainability

All 3 residents and family participants from Clusters 1 and Cluster 2 indicated they want to sustain video conferences, and suggested to expand to include more of their family members and more clusters. The technical support structure built in to the study was identified as an important component positively affecting participants' comfort level. However, family participants indicated, the "video conferencing support team" requires more staff awareness and encouraged involvement. Similarly, York (2005) points out from his experience of setting up adaptive computer labs in long-term care homes, "the system only works in environments where staff and management teams are committed and willing to embrace the initial extra work required to make it happen."

When this project began, administrative staff was dealing with the strong possibility of a staff strike. In final interviews, family initiated conversation about this situation. "Under these circumstances, had this study been dependent on staff involvement or required a lot of their time it would not have turned out as successful." These sentiments were based on issues over staff duties/responsibilities raised in meetings family had with care team staff.

Nevertheless, one of John's sisters, who works within the healthcare field stated: "Staff: I think they are key in sustaining this type of project. They could be good advocates particularly as people realize what it means to residents." Staff was to be invited to participate in planned demonstrations/in-services as part of the study. However, due to scheduling issues, logistics, and time constraints they did not take place. Thus, I strongly suggest hands-on demonstrations and video conferencing workshops be completed as follow up to the study with an open invitation to residents, family members, staff, and community members.

Evidently, there is more work to do, as indicated by my journal entry near the end of this study:

Sunday, May 19: An unknown worker or volunteer (mid 30's, wearing a blue hospital gown over her clothes) tried to enter the room while a TVcall was in process. I pointed to the sign, "Please do not disturb. Video conference is in process". The woman proceeded down the hall and inquired to a staff person, "What is video conferencing?". She didn't respond, but continued on with her job of distributing medication to the residents. This

unresponsive staff person has worked a number of Sunday shifts in this area while video conferences have been in process.

Whether the people involved were curious or indifferent, this incident highlights the fact that many people, staff, volunteers, family, residents, do not recognize video conferencing by name. Thus, they may also be unaware of what it means to residents and the families who have used it or could potentially use it and benefit. There is a need to inform the staff and volunteers, get more technical support in place, and secure longer/ongoing funding, in order to make video conferencing available, affordable, and accessible to more residents and their families, so they can see for themselves what it is and determine what role it may play in their daily life. Suggestions for how to make it happen:

- **Adopt the PROCLAMATION.** “The ability to stay connected with family, develop relationships, and learn with the use of technology (i.e. video conferencing) is not a privilege for the few - it is a right for all residents.”
- **Support video conferencing for residents through family-oriented policies of the long-term care facility and job descriptions.** If according to policy, family are welcome visitors in the long-term care home then they should support video conferencing in the long-term care home because it enables more family members, who do not live close to the long-term care home, to take on a “regular visitor” role. It needs to be determined which staff will be part of the video conference and what is their responsibility. If job descriptions outline that it is part of the staff’s responsibility to assist residents to maintain contact with family and the world around them then staff could justify the time spent assisting residents with video conferencing.

Specifically in regards to the Eden Alternative, an 11th Principle should be adopted which acknowledges that actual family members (not just *family-like* relationships with staff) contributes to residents’ improved quality of life; currently the words “family” or “family involvement” do not appear in the 10 Principles.

- **Share the residents’ stories.** I believe it is the residents’ stories of TVcalls and Reacquainting visits that will inspire others to make it happen.
- **Embrace technology with the residents.** York concludes: “Keep looking for ways that technology can improve your healthcare delivery and your medical records. However, at the end of the day, reflect on how to direct some of those investment dollars at improving the quality of life of the individuals under your care” (p.47).

Access to video conferencing specifically for Care Team meetings is an extended application put forward by a family member. The benefits described were based on family's personal experience:

"I had no previous experience with video conferencing or web conferencing but had an *audio conference* /teleconference with the long-term care staff just before you approached us about getting involved with this project. It involved the whole care Team, my mom and brother - more than 8 people. It was exhausting and difficult to keep track of who was speaking, while at the same time try to solve issues raised during the meeting. I didn't have the visual clues to help guide me and provide me more information/insight to the situation. Given my experience with the audio conference and the video conferencing with my family, I can now see how useful video conferencing would be to family who need to meet with a resident's care staff team."

John's Sister in Ontario

In this way video conferencing may improve communication and relations between family and staff and as Gladstone et al. (2006) state "working towards a care model that recognized and values the expertise of all involved and emphasizes a collaborative approach to care can only improve the quality of life of residents, family members, and staff alike." (p.105)

Acts of neighbourliness and leadership, that places the need to improve resident quality of life over and above the inevitable objections to change, are required. This includes finding creative, cost-effective ways to make video conferencing accessible to residents and their families irrespective of their income.

6.8. Addressing the Access Issue

Fear of technology has been a reoccurring theme throughout my research. The question is whose fear? The residual issue to be addressed within this project is access: internet access, access to family, access to learning opportunities and accessible technology for long-term care residents, particularly frail elderly. Accessible technologies, does not simple mean having the equipment, to be accessible it must also be user-friendly, thus adapted to the context and purpose in which it is being used and for the people using it. This section is divided into three parts, first the fear of technology, second the user-friendly factor of the chosen video conferencing equipment is

presented, and third the issue of age is discussed. All three parts provide insight and direction related to inclusion strategies.

6.8.1. Fear of Technology

Stereotypes of old age and ageist attitudes imply that learning in the later years is not very important, insinuate that elderly are not interested in learning, and not interested nor able to use modern technology (Cutler, 2005; Jarvis, 2001; Niu, 2006; Nussbaum et al., 1989). Rose dispels these myths and articulates her interest in technology.

At the age of 81, Rose expressed an interest in learning how to use a computer. As I recall, Rose was sitting alone in the dining room waiting for a cup of coffee, the volunteer co-ordinator and I, enroute to meet another resident, stopped to talk. I was introduced to Rose as a new volunteer, interested in computers. She put her hand out to mine, looked me in the eye, and said, “My kids talk about all kinds of stuff they do on computers. I’d like to know more about it. Try it out. I’m no dummy.” I was captivated by her eagerness and confidence. On numerous occasions during the past three years she and I have discussed technological advances and explored them together. However, it took three year to get supports in place to explore video conferencing with her and the other residents.

Rather than a fear of technology, Rose’s comments about the new tape recorder used in her interviews further illustrates her connection and on-going interest in technological advances.

“It’s a small little thing. You know I used to have a camera about that size. It was a Minolta very modern for its day. I don’t know what happened to my camera. It was a good camera. I like your tape recorder. (Rose picks it up, looks it over, and pushes a few buttons.) It is amazing how small they can make technical things now and what technology is able to do now is amazing.”

Impressed by the visual aspect of video conferencing, Rose articulates what video conferencing technology enabled her to do through numerous and repeated comments about the i2eye logo that appeared in the corner of the TV screen during the calls: “Its very catchy and to the point.” She

explained, “With it [the video conferencing camera] I can see my kids with my own two eyes”, “We are able to see each other eye to eye”. Sometimes in a joking playful manner, reminiscent of a familiar childhood game, she said, “I spy with my little eye”, wittingly or perhaps unwittingly cautioning about possible privacy issues and the use of surveillance cameras (referred to as granny cams) presently used by family to guard against elder abuse in nursing homes. However, rather than video surveillance, her enjoyment, amazement and focus was on the live face-to-face interactions.

It has been said and I would agree, there is a lack of understanding of what video conferencing is and therefore people are unable to see how it may be useful to long-term care residents. But then how does that explain the fact that video conferencing is already being used in business, health, and education sectors, privately as well (i.e. MSN messenger) primarily by younger people. Perhaps it’s more a case of, seeing the potential for oneself but not others? When it comes to technology and seniors or video conferencing in a long-term care context a wide-angle lens is required.

The target audience for new technologies, generally speaking, is not seniors. In fact, dealing with new technology is listed as one of the five most common barriers to learning encountered by seniors (Niu, 2006). Why is that? Nui, a research analyst for the Canadian Council on Learning explains,

“The National Advisory Council on Aging (NACA) has argued that technology has great potential to enhance seniors ‘independence and social participation. Older adults are one of the fastest-growing groups of consumers purchasing computer-related products and services. However, seniors tend to adopt new technologies at a slower rate than other age groups. Although many seniors are discovering and making full use of the technologies, **many more are struggling to gain access.** Recent research has largely debunked the myth that seniors are, on principal opposed to - or afraid of - technology. However, technologically advanced products and services are rarely designed with any consideration for the particular needs of older adults. As a result, seniors are often sensibly wary of these technologies and may encounter difficulties in adopting them. Given the potential for computers and the internet to alleviate other barriers such as mobility or transportation, becoming familiar and comfortable with technology can open up many otherwise inaccessible learning opportunities.” (p.5)

Evidently, my families' experience, and the struggles encountered in getting this project started are not unique there is generally very little support given to the elderly to explore new technologies.

Thus I give thanks to those who did provide support, particularly technical support. I came to this project not as an IT Expert, far from it. In true adult educator form I entered with the assumption that we would explore the subject of video conferencing together. The participants including the volunteers, would each bring life experience, talents, and skills to enrich this video conferencing experience. I am not an expert: I am a facilitator. I am very grateful to my husband, Rose's daughter-in-law, as well as John's brother-in-law and nephews, who invested their time and expertise in the initial technical setup phase. They provided the critical technical support for the far location, which made it possible for residents to share the video conferencing experience with their family.

From my own experience, the participants reported experience in all three clusters, and interactions with staff, the following observations are made pertaining to fear of technology. The three resident participants never shied away from the opportunity to explore and use this technology to visit with family. They were hopeful and excited by the possibility, anxious with positive anticipation. There was however a heightened anxiety for some family members, mine included, during the installation phase in part due to unfamiliarity with technical vocabulary and details sometimes encountered during an installation. For example, although I was very eager to see the video conference initiative through, I had to face my own inadequacy in the IT department very early on in the video conferencing project. I experienced feelings of anxiety (Will it work? How do I make this work? What does --- mean? How does a router affect the setup? I am not an IT expert, clearly!)

John's Sister in Ontario described installation and the first few trial conferences as "getting over the hump". His Sister in British Columbia acknowledged that their family was very committed to exploring video conferencing so they struggled through the technical setup. She emphasized,

“it was a struggle and very time consuming in the beginning”. But in their final analysis it is very much worth the time and effort.

I recall the initial Quality of Life Coordinators meeting, as another example or incident hinting at fear of technology, or at least a lack of understanding when there is no hands-on video conferencing experience. Because the equipment was not set up in time for the recruitment meeting with the Quality of Life Coordinators, staff did not have the opportunity to see the simplified process demonstrated before they generated a list of potential resident participants. I provided a brief description of the setup and video conferencing process along with a picture of the equipment from the website. One coordinator commented that at the point I said, “Highspeed internet connection is required for the video conference,” (which was near the beginning) I lost her. In her words, she experienced the “Charlie Brown teacher syndrome” all she heard was Wa Wa Wawawa. This situation emphasised reinforced the objectives of this study, my point exactly; hands-on experience with video conferencing is significant and residents are not the only ones who may need to see video conferencing in process to understand it. For me, it was a reminder to keep it simple, and a call for simple terminology. Subsequently, resident participants, as an outcome of this study, provided useful descriptive terms for the concept of video conferencing in this context based on their experience. Video conferencing equals TVcalls and Reacquainting Visits.

6.8.2. TV Calls vs. Computer-based Conferencing

As anticipated, resident participants were comfortable with the TV video conferencing application. It was user friendly☺. Asked if they would like to try visiting using the computer both Rose and John reiterated that they were comfortable with the present TV setup. The three resident participants had varied prior experience with computers. John mentioned in his final interview “I haven’t really used a computer. I once had someone show me how to play a game on the computer. I have tried a few games on the computer that’s all. I liked it but haven’t been on it or used it again in a very long time.” John’s sister in Ontario noted he and their mom had been to the computer lab to see recent e-mailed photographs of John’s newborn grandnephew. Katherine presently has a youth volunteer assist her with e-mail. And Rose and I, over the passed

three years, have together explored computers in the computer lab. This has included playing games, e-mail and an occasional web search on topics of mutual interest. Yet, Rose also highlighted Television is accessible to other residents.

Question: “So if you could do the same thing on the computer - meaning video conferencing - seeing and visiting with your family but instead of using the TV using a computer screen, would you be interested?”

Rose’s response: “No I don’t think so. I liked the TV. Everybody has a TV bug. I mean everyone/most people around here have a TV and watch TV. They could easily do this kind of visiting - video conferencing - with a TV.”

John’s response: “I liked looking at the TV. It was easy. I really liked it on the TV. I don’t know about the computer. *(The process of how it works on a computer is unfamiliar to both John and his mom. I briefly describe the process highlighting that instead of the TV screen you would look at the computer screen to see your family. They are noticeable confused.)* I felt comfortable with the TV.”

John’s Mother’s response: “I have never used a computer. I was comfortable using the TV.”

These comments highlight computer-based web conferencing as an area for further hands-on exploration, for comparison with the present television application, and possible adaptation within the long-term care context. And further suggests to have technical support provided as part of the structure during any additional video conferencing activities, particularly if computer-based. A final thought on technophobia and the use of technology, Hajjar (1998) mentions “Although the residents over 80 generally show no interest in operating a VCR on their own, they like the structured public movie events, as long as someone else operates the machine.” (p.51) The same may be true for long-term care residents and video conferencing technology, it is evident these resident participants enjoyed the “event”, family visits, TV Calls, reacquainting visits; that they did not use the equipment independently is irrelevant.

Internet access and technical supports are required to continue with the video conferencing process.

6.8.3. Age: What Does it Matter?

When I first tried to get video conferencing set up with my grandma at her long-term care home, comments I heard did not support an elderly person using such modern technology regardless of the reasons for using it. Staff and other people I came in contact with often mentioned how it would be a good thing to have such technology available to a few of the notably younger residents.

During the recruitment and training phase of the Interactions Face-to-Face project the issue of age again surfaced. Initially young residents who often go into the computer lab and e-mail were at the top of the staff generated list of potential resident participants based on their assumption that video conferencing would involve using a computer. Once explained that this video conferencing setup required a TV not a computer, older residents were added to the list. And when I informed my friends and colleagues that a 40 year old resident volunteer was assisting me with setup and a training workshop, I encountered juxtaposed responses from them such as: “There are young residents? Young people live at the long-term care home?” The reality is as Kane (1995) states “the average nursing home is an extremely mixed neighbourhood.”

How did the participants approach the subject of age? Rose who is very proud to have celebrated her 84th birthday once commented, “I sleep because I’m tired. I’m old.” Yet, in the years that I have known her, she never used the term elderly to describe herself. And, she very rarely focuses on the end of life when we visit. Quite the opposite, on a number of occasions she pointed out, “Other residents are much older, 95 years old or more” adding “I have many years ahead.” Katherine and John never told me how old they were. His very active mother who lives independently and regularly visited the long-term care home, was 85. When I wrote the first drafts of the cluster summaries I initially had indicated the residents age within the first sentence but the more times I read it, the more I questioned, What does it matter how old they are? How might knowing their age influence/affect how the reader sees these individuals?

Ageism is the notion that people cease to be people, cease to be the same people, or become people of a distinct and inferior kind, by virtue of having lived a specified number of years. (Comfort, 1977, p.35, cited in Glendenning, 1985)

Butler (1975) explains that ageism can be seen as a process of systematic stereotyping of and discrimination against people because they are old. “Older people are categorised as senile, rigid in thought and manner, old-fashioned in morality and skills. Ageism allows the younger generations to see older people as different from themselves; thus they subtly cease to identify with their elders as human beings.” (p.12, cited in Glendenning, 1985)

Fact is, Rose, John, and Katherine are long-term care residents and regardless of their present age these people will spend the rest of their lives in a long-term care home, however long that may be. What is important is their quality of life!

6.9. In Closing

The need to improve residents’ quality of life must be placed over and above the inevitable objections to change. Do not let fear and misconceptions rule. The focus of this project was not on the intricate technical details of how the equipment functions but rather giving long-term care residents the opportunity to experience video conferencing with their family as a means to address their quality of life. This video conferencing initiative was about seeing people, recognizing long-term care residents as members of our community, and visiting with family and neighbours; in other words, finding a way to “get closer to home”.

I vividly remember my interaction with Rose immediately following her initial video conference. It was a reality check for both of us.

Rose can't stop smiling, "Yes the picture was very good", she said. While writing the comments in her memory log, I notice Rose tip her head back, eyes closed. At first I say nothing, I think maybe she is tired. After seeing her head tip back a few more times I am concerned. Intermittently, her eyes are tightly squeezed shut and then her eyebrows lift. Does she have a headache? What are the signs of a stroke? "Are you alright?" I ask. "Yes, I'm fine." she calmly replies taking in a deep breath. As she exhales she smiles, eyes still closed. "I'm picturing my son and his family. They were just here. I visited with them on the TV." She pauses, takes another deep breath. "I can hardly believe it," she says. Savouring the moment she slowly opens her eyes. I reassure her and am reassured, it is not a dream. It really has happened.

On the way back to her room, she reaches for my hand, and holds it close to her chest. Her heart is beating as fast as mine. She recounts the events of this evening to me and then again to the night staff who have arrived to put her to bed.

As I walk down the corridor, headed home, the theme song from the Lawrence Welk Show - which my Grandma used to watch on the neighbour's TV and that I now sing with my children - plays over and over in my head, "Good night, sleep tight and pleasant dreams to you..."

In this shared experience I feel I know: TVcalls and Reacquainting Visits are worth the effort.

6.10. Further Study and Applications

For future study that is resident-centred and addresses quality of life, continue to use a wide angle lens and focus on the *I's*: Increased interaction, an Intergenerational component, Informal learning and care, as well as Inclusion strategies.

- **Family involvement research:** Continue to investigate role of the extended family and effects video conferencing has on visiting patterns, the family-resident relationship, and family-staff relationship, as it relates to quality of life. While all three resident participants in this study have lived in the long-term care home for more than two years, video conferencing may ease the transition into a long-term care home for a new resident as well as their family.
- **Critical analysis regarding access and use in the long-term care context:** Martin points out "women's relationships are based more often on shared experiences and emotions and are therefore based more on talking than activity." (p.48) Perhaps track video conferencing along gender lines, economical and cultural. Some research suggests that adult daughters make up the majority of family visitors and that women visit more regularly than men. (Gladstone, et al. , 2006)
- **Comparative studies of video conferencing equipment for use with long-term care residents.** (i.e. "TVcalls" vs "Computer calls") Further explore video conferencing technology and adaptations useful for long-term care residents as well as for homebound

elderly. Yahoo Messenger was suggested. What are the pros and cons? Take into account simplicity of operation tasks, comfort level, costs, accessibility and privacy. These are studies to pursue in Gerontechnology; involve senior long-term care residents in the process and one can further knowledge and understanding in Learning in Later life and the social goal of lifelong learning.

- **Health related studies:** To what extent video conferencing contributes to long-term care residents and their families' health and well-being or healthy aging, is a major focus for further research. Investigate usefulness of video conferencing for residents with dementia (varying stages of) and their families; set up video conferencing in a dementia unit within a long-term care facility.
- **Inclusion strategies:** Find creative ways to make video conferencing cost effective and accessible to residents and their families who have varied financial means. For instance, future communications infrastructures and policies at various levels (e.g. long-term care homes, educators, health providers, governments, etc.) should seriously consider inclusion strategies and affordable availability of effective applications for long-term care residents.
- **Embracing technology with residents - Positive developments with IN2L:** It'sNever2Late (IN2L), a small company has set up adaptive computer labs that provide activities, engagement tools, and unique experiences for older adults with physical and/or cognitive disabilities. The company's primary goal, "to find creative ways to embrace the world of dementia from a technological perspective. Their efforts are focused on making today's experiences more meaningful and engaging." (p.45, York, 2005) IN2L recently launched a partnership with the Eden Alternative, which suggests Eden's strong commitment to positively impact the lives of elders in long-term care includes embracing technology. This partnership, if it is truly collaborative as promoted, provides the opportunity for Eden long-term care residents and staff to give input into the IN2L company's development process specifically, and potentially gain a stronger voice in the technological world. Video conferencing is presently **not** part of the IN2L system.

- **Intergenerational relationships and learning:** The extent to which involvement in a video conferencing project such as the Interaction Face-to-face affects intergenerational relations (i.e. attitudes towards aging and technology use) should be followed over a longer period of time from various perspectives including the elderly residents'. Contributions to formal education should also be considered. For example, Holzberg (2006) presents several Websites to help learn more about what Interactive Video Conferencing (IVC) can do for teaching and learning. Listed are exciting opportunities for K-12 content delivery but intergenerational IVC involving long-term care residents are not included. Add them!

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www.communitynet.com

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www.webtv.com


WWW.Gentleteaching.com

APPENDIX A: I2EYE DVC-1000

Picture of i2eye from D-link Website

D-Link Systems, Inc.


<http://www.dlink.com/products/DVC-1000/grandchild.asp>




products | sitemap | support | where to buy | corporate

Search GO


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- Tech Support
- Press Section
- Awards
- Promotions
- Partners
- Mac Compatible
- Sales Support
- Success Stories
- Gamers Haven
- Configurator




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Initial Responses and Follow Up

Taking a Look at the i2eye DVC-1000

Two i2eye DVC-1000 demo machines were provided by Saskatoon's Western Business Machines for a designated trial period (last two weeks in December 2003) to determine the suitability of using this produce within the context of Varcityview Long-term Care Community Centre. Varcityview IT Support staff was involved with the testing. However, given the short time between request for demos and receiving them, clearance had not been granted to test or use the equipment on Varcityview 's existing net service link (Saskatoon Regional Health). Thus an alternative location was found, Telecommunications Research Laboratories (TRLabs).

Initial Responses

My initial response: small machine, easy and quick setup with clear instructions provided. The display keys on the TV screen are large and simplified, easy to use with the provided remote control. Can be used with or without a phone receiver. Good audio and video. The affordable i2eye DVC-1000 uses the Internet to connect people but doesn't require the use of a computer or a mouse. The fact that it uses the TV and telephone, technology elders are familiar with, and the simplicity of using phone numbers to begin the conference, means that frail seniors can control the process more easily than other computer video conferencing cameras we have been using with my family .

Varcityview IT Support initial response: *"It shows great potential for use with residents at Varcityview ."* He was impressed with audio and video quality, the simplified procedure, and agreed it was affordable. (\$200)

Varcityview CEO's initial response, without seeing the demo: *"How many would it benefit?"* (This response was relayed back to me.)

Follow up

January 13, 2004. Varcityview IT Support staff inform me that Saskatoon Regional Health will not allow i2eye to be connected to the existing system citing concerns with firewalls and drain on the system. Thus in order to make this type of video conferencing interaction available to residents a designated line would have to be installed (\$???) with an approx. \$40 monthly fee to maintain it. Varcityview IT Support also indicated that their system at Varcityview was to be upgraded in the near future and that the Department of Health is working on connecting regions with a video conferencing system (thousands of dollars). However when questioned as to who will have access to this system it is apparent that it is for health providers and administrative purposes. It will not be made available to residents.

Tests: i2eye DVC-1000

1. DVC-DVC box both at TRlabs (local network)
 - very good quality video and audio at 512 Kbps transmit and receive (24 frames/s)
 - phone interface looked promising for audio

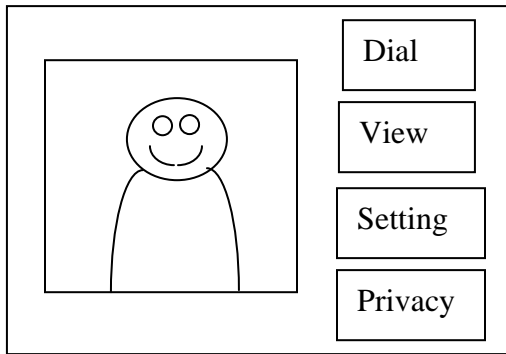
2. DVC-DVC box (1) at TRlabs (1) at home plugged into Sasktel Highspeed (ADSL)
 - DVC does automatic adjustments
 - Good quality video and audio when limiting transmit –receive bitrates to 192 Kbps averaging about 15 frames/second
 - with highspeed connection Sasktel (perhaps Shaw) there is likely consistent and acceptable performance

3. DVC (TRLabs) – Netmeeting running on Windows XP with Logitech click smart 310 camera (a moderate priced –moderate to low quality two year old webcam) and Sasktel highspeed at home
 - quality video is dependent on the individual webcam setup
 - worked but performance was quite variable depending on direction of call (i.e. DVC to Net better than Net to DVC It would default to lesser quality settings)
 - medium size window setting was better than large
 - DVC to net was 14-15 frames /second
 - Net to DVC was 6 frames /second
 - * very little control with widely varying performance

4. DVC (at home) Sasktel highspeed to Netmeeting Windows 2000 on Highspeed light
 - basically similar kind of performance to #3
 - Very good actually, since going through 2 ADSL boxes, one “light” (low –speed)
 - * set transmit /receive speed on DVC Box to 96 K (minimum speed setting)
 - 112K worked, but not as well
 - about 14fps (72kbps) DVC to Net
 - 7 fps (34 kbps medium window) Net to DVC
 - (45kbps large window)

i2eye DVC-1000 Video Conferencing: Demonstration Video Tape # 1

1. Turn on i2eye – notice it self configures
2. Connecting i2eye from home to TRlabs (Institution)
 - dial TRlabs using phone -regular phone number
 - configured so that IP number is obtained automatically
3. Connecting i2eye from TR Labs (Institution) to home
4. Take a look at some of the Setting Options



Setting

General

- Always answer incoming calls
 - Turn on video privacy when answering calls
 - Play sound with user input
 - Automatically adjust video contrast
- OK Cancel

Personal Info

Name

Country Code

Area

Phone number

Network

- Obtain an IP address automatically
- (* note the significance of this feature)

* Ideally one would want to have hands on experience with the i2eye to demonstrate what it is and how it works. Without any hands on experience, the concept and process may be confusing, particularly for some elderly people. For example, although you can see both people, you can only hear one person's side of the conversation. Unfortunately this was the only way to record a demo videotape. The videotape does not adequately show how effective this affordable video conferencing equipment is.

APPENDIX B: TECHNICAL BUDGET (SIX MONTH TIME FRAME)

Internet access installation: \$100 – this fee is waived if client purchases a package during a Sasktel promotion (i.e. Until April 15, 2004 Sasktel's promotion was: Starter kit and access for 6 months at half price totalling \$23/month)

Monthly payment: regular price is \$46/month (Sasktel Highspeed)

4- i2eye DVC-1000 video conferencing cameras: regular price \$400. D-Link, the manufacture had a promotion last Christmas, two cameras for the price of one. Western Business Machines in Saskatoon can bring them in possibly at the promotional price. To reduce cost further, I will approach Western Business and/or D-link to donate cameras.

	Line installed + Internet + Cameras = Total	
Total Regular Price:	100 + (46x6) + 1600	= \$1976
Without camera promotion:	---- + (23x6) + 1600	= \$1738
With camera promotion:	-----+ (23x6) + 800	= \$938
Donated cameras full price Internet:	100 + (46x6) + -----	= \$376
Donated cameras Internet promotion :	---- + (23x6) + -----	= \$198

APPENDIX C: DETAILED SUMMARIES OF PROJECTS FOR COMPARISON AND DISCUSSION

Namazi and McClintic (2003) Qualitative Study

Computer Use Among Elderly Persons in Long-Term Care Facilities

Namazi K, and McClintic M

Educational Gerontology 29(06) pp535-550 (2003)

Three donated computers were set up in a small library of a 300-bed long-term care facility. Twenty-four residents signed up for the computer program but only five remained after a year. This article discusses the *five categories of obstacles* that may have caused the discontinuation of participation (from 24 down to five after the first year): *physical and cognitive, personal, hardware/software/technological, organizational, and environmental*. (Refer to pp.543-549 for the negative factors and strategies for improvement). An excellent literature review is provided. Reference to participants with dementia noted. The results of the four objectives are very informative (see below). Objective three is similar to my goal for the Interactions i2eye initiative.

This qualitative study was designed to determine whether computers can be helpful to elderly persons residing in a long-term care facility. Method: a questionnaire which was distributed at the start of the program, after six months and again at the end of the first year. The questions gained information about their demographics, interests, abilities, and willingness to learn about computers.

Namazi and McClintic (2003) Project Objectives and Results:

- (1) To teach residents the elements of computer operation, how to start their favourite program(s), and spend a minimum of 30 minutes twice a week on a computer.
Result: *too much time*
- (2) To teach residents adequate amounts of computer information so they can use computers without assistance from staff after six months.
Result: *not realistic*
- (3) To use computers as learning and educational tools for connecting elderly persons in long-term care with the outside world via e-mail and web technology
Result: *This became the primary reason for participation*

- (4) To motivate participants to search for medical, legal, or aging-oriented policies and to report their findings to other residents in the facility who are unable or unwilling to use computers.

Result: *The idea behind this objective was to develop skill and become a resource for other residents providing a chance to give back. This goal was eventually abandoned.*

“ What made the program successful was how five of these elderly individuals eagerly pursued their interests in computers and integrated what they learned into their daily activities. The oldest of the participants, a 95 year old woman, is now a regular computer user who often goes to the library to check her e-mail and occasionally surf the Web.” p.543

Voice of the participant included but not quoted. What made the program successful according to the participants?

Funding was an issue which affected what could be offered.

Need to think about this: “ The most obvious reasons for these participants wanting to communicate with family and friends were that they had someone on the other side who was eager to communicate with them electronically. While others liked the idea of e-mailing, they did not have anyone to communicate with and did not feel it was acceptable to contact strangers and develop lines of communication.” (p.542 Namazi and McClintic)

Seniors in Cyberspace Project

(Fall 1999- private Toronto nursing home)

A computer was donated to residents' council by IBM staff who also set up the computer.

The Nursing home agreed to pay for Internet service. Seneca College faculty was approached by the nursing home and agreed to train staff and volunteers in volunteered to train staff and volunteers in the introduction of computer activity to the residents.

Program design:

- Computer training based upon the premise that the *relationship with a volunteer would be key to the learning process*
- residents must maintain control
- goal to explore what seemed to work best for the seniors and the volunteers in a computer training program.
- Philosophy was that these adult learners could enjoy using technology if their psychological needs and educational needs were kept in mind. Note: It was planned to *emphasis the relationship needs of the frail elder* to the volunteer in the orientation and training program.

Resident Participants: Five higher functioning residents were chosen from a group of residents who volunteered to be in the project. Recreation staff used a list of criteria to determine suitability.

Volunteers: Recruited first semester students from a community college Social Services Program (first semester students). Ten students initially volunteered, dropped to three by the time they *received training of three hours and a nursing home orientation*. After three months only two volunteers remained and they were experiencing health problems. It was decided to begin to recruit second year graduating students*[(fourth semester students)]. "Staff and a faculty member took over from the original volunteers as they didn't want to see the project falter." Eventually three more volunteers were recruited and became participants in the third phase of the project. They agreed to a commitment of three months.

The Four Phases of the Seniors in Cyberspace Project:

Phase One (1-3 months): computer setup, resident participants selected, and volunteer recruitment and orientation

Phase Two (3-6 months): success was evident as one of the participants became self sufficient on the computer and others were expressing an interest as were several family members. Obstacles with the volunteer base.

Phase Three (6-9 months): great deal of potential for success was noted, a second sister nursing home received computer from the community college administrators, volunteers made three-month commitment, they received less orientation than first students but more orientation on instructional strategies as they were beginning to gather information about the learning needs of the elders in the project.

Phase Four (One Year): Ministry of Citizenship, Culture and Recreation made aware of the project due to media coverage in Phase One and Phase Three. The volunteerism department in particular was very interested. At the time this report was given the community college was working with a number of public agencies to submit a proposal to continue the project. The goal will be to involve intergenerational programs, local high school students and more nursing homes and more organizations willing to donate computers, time and technical expertise. The long range plan “ to continue to gather information about resident and volunteer needs and to develop a volunteer guideline that will be published online made accessible to all people interested in intergenerational programming for the very frail older senior.”

Project results:

Of the 5 Phase One residents, 3 remain involved with staff members on the computer.

It is noted that these residents will always need some one to assist them with getting on line and dealing with menu choices and e-mail steps. (Same observation made in the Connections project)

Recommendations for starting a project: (see p 8-11 of the article for list of the 15 recommendation) First few recommendations relate to the setup process, recommendation 6 ,9-13 relate to volunteers.

The underlying theme in these recommendations is that *program coordinators must pay special attention to the relationship issues both within the home’s systems and among key players within the program.*

Discussion:

“The right of the frail elderly to be able to use and or enjoy the benefits of the computer is not to be questions. The challenge is “ how we ensure they get the opportunity”(p.11)

****The issue highlighted in this project is ACCESS and the significance of RELATIONSHIPS for frail seniors. The need to consider not only the residents’ needs but also the volunteers’ is key.

**** This project was focused on the learning process. The Connections project is initially more focused on teaching content.

The Connections Project

The goal of the study was to demonstrate the value of providing frail seniors with Internet access(iii). This was a six month introductory computer program designed for seniors with limited autonomy. *The McGill University Centre for Studies in Aging* initiated the project, provided the equipment and technical resources. A grant from the Federal Government of Canada's Office of Learning Technologies (HRDC) provided funding for the research. The final report was submitted March 31, 2000.(see www.aging.mcgill.ca/connections)

The project included a research study with **four aims**:

- To examine the feasibility of providing the necessary resources, both human and technical.
- To see who participates.
- To determine how much and for what purpose participants use the computers.
- To examine what *psycho-social* benefits are experienced by participants.

A quasi –experimental design was used.

Methods: Participants were interviewed prior to starting computer activities and again six months later. SF-12R Health Survey pre test and post test. Computer usage logs were kept, a questionnaire was answered by volunteers, and teachers were interviewed. As well a focus group was held for the staff who supervised the program at each site.

The participants:

-**Two seniors' Residences** and three Day Centres in Montreal

-**participant selection:** information meeting held at each site. Both residences have sections for those who need nursing care, as well as accommodations for those who are relatively autonomous. The program was well publicized ahead of time, mainly to the autonomous residents, by word of mouth, posters and newsletters, and those who were interested attended the information meeting.

-**84 people** participated: 69% women 31% men, average age 86. Two thirds of the participants lived in a seniors' Residence. (See Table1 page 2 of final report)

(SF-12R Health Survey used to determine participants' physical and mental health)

The computer program:

-Nine hours of teaching provided by an experienced teacher

- participants scheduled in pairs for a regularly scheduled one hour a week session
- shown the basics of WORD, the Internet and E-mail (See Appendix 3 for Course Outline- and my comments, and presenters discussion point at the end)
- remainder of the six months a volunteer was available to help participants as they continued their assigned weekly hour.
- E-mail was most popular activity. (NOTE: Australian Article From Window Shopper to E-senior.)

Participant Benefits: Analysis of data from various sources yielded six major categories of participant benefits

1. Greater sense of social inclusion
2. Strengthening of social networks
3. Sense of mastery and increased self-esteem
4. Mental stimulation and challenge
5. Filling a void- (alleviated boredom, “something to do when feel depressed”)
6. Learning and acquiring new knowledge

Teaching and Learning

Teaching methods:

- Working with more than one at a time was a challenge due to high level of individual support requested, differences in abilities, poor hearing or vision, and shared internet service (1-1 would be best)
- mouse control - unsteady hands of people in this age group make it particularly hard.
- Essential to let participants do all the key strokes and use the mouse themselves

Barriers to learning:

- cognitive and memory deficits were an ongoing concern despite the fact that most participants clearly enjoyed their computer time.
- Not enough time allotted.
- A manual was available but few people used it. The researchers’ impression was that though it is specific to the course outline with basic procedures and illustrations, it needs to be reduced further.
- low level of English literacy was an unanticipated barrier
- medical conditions – slower to complete tasks but sense of accomplishment

Participant progress: The majority relied on volunteers to remind them about procedures, even when they were doing things they had done many times before. Researchers note that “These people will probably always want someone at hand to help them if they continue to use the computer only once or twice each week.”

* Note: At the Residences , a number of participants used the project computers on their own in between scheduled sessions.

Persistence: Almost all those who reported a lot of E-mail usage were still using the computer after six months, while very few of those reporting no E-mail usage were still participating.

*Note: Noticeable difference in dropout rates in the two Residences

The data did not reveal any statistically significant difference between the two groups of participants that might have explained this, interviews suggested that unfulfilled expectations were particularly high at the residence with the higher dropout rate.

Question: To what extent did the environment play a role? Were staff supportive? Attitudes of the staff, volunteers, families?

Resources for a successful program:

Committed Staff: time consuming program but with noted benefits for participants.

Volunteers: proved to be an essential part of the program. If they were unable to attend, the scheduled computer session had to be cancelled. Getting enough people who could commit for the long term was difficult. Those that stayed the longest were those with flexible hours, because they were either self-employed or retired. Several volunteers already had a commitment to the institution through previous volunteer work and they proved to be among those who continued the longest.

Pleasant location: The sites that worked best were those where the computers were installed in a separate room located in the same general area as other activities.

Adequate equipment and Internet service:

-The faster the system the better the experience the participants will have.

-Researchers from this project note that “**Web TV** which was not available at the start of this project, would provide an interesting option when only E-mail and the Internet is needed, since the keyboard simplifies Internet navigation.”

Special adaptations for vision: Almost all participants had diminished visual acuity

Discussion:

******Using E-mail** was the one factor predicative of persistence. This suggests people will be more committed if they have concrete goals.

**** **This program was originally very focused on content but changed to focus on the individuals process.** “As the program progressed we realized that each person’s pace and achievements would be different, so our approach to teaching moved away from the set course outline towards following their individual abilities and interests” **p.8**
(**Adult Ed. Principle- self-directed learning**)

**** **Program Guide, Volunteer Guide and computer manual developed by The**

Connections Project available online (www.aging.mcgill.ca/connections)

****** WebTV suggested as an option to be considered in future projects**

Sandra Timmermann (1998) also notes Web TV as a good option for institutionalized frail seniors. (p.69 of New Directions for Adult and Continuing Education: Using learning to meet the Challenges of Older Adulthood)

WebTV Project at Aase Haugen Nursing Home (USA)

In collaboration with Luther College, Aase Haugen Nursing Home, a registered Eden Alternative home received a grant through Lutheran Brotherhood to launch a pilot project in the fall of 1999. The program offers WebTV units and communications training for residents who wish to use e-mail, visit websites on the internet, or join a chat line. The WebTV equipment is designed for ease of use by residents who may have restricted vision or manual dexterity. Note the enlarged letters on the simplified keyboard with no mouse. (Cost: \$200 US for the Web TV unit and an Internet usage fee if a television is already available.)

Luther College provided student volunteers for 10 hours a week to work with residents to provide the training and technical assistance for residents. Luther College students majoring in nursing, healthcare management, social work and information systems have been involved, along with volunteers from town.

In 2000, the collaborative program received another Lutheran Brotherhood grant to be used to purchase and install hardware and software for four more WebTV units at the care facility.

In November of 2001, *IowaLife -The Demoiner Register*, a local newspaper article highlights the Aase Haugen WebTV program's success. "The average age of the 139 residents is about 92 years old. And fully one-third of them keep in touch with friends and family by e-mail." Comments from Lynne Monroe, The Aase Haugen nursing homes' development director, are noted from the same article:

"Although the original plan was to teach residents to use the WebTV system independently, that wasn't realistic. (Many are nearly blind or have crippling arthritis, which makes it very difficult to type in messages, she said. Others suffer from varying degrees of memory loss.) Even though less than a handful of residents can solo on the system, the program is a success because of the increased contact it has given residents. The volunteers have seen the joy that a message can bring to a resident. They have seen residents embrace new technology. They have seen how even helping a resident to press the 'Send' button allows that resident to assume some control in his or her life."

Discussion

**** TV with internet access*[] is worth exploring

**** Rather than independence as the goal, I see providing seniors the option to *access* new technology along with increased social *interaction* as the goal in the Interactions Video conferencing initiative (Choices and connections)

**** Jarvis's view of learning in the social context. (Informal, experiential learning)

**** Lifelong learning, learning in later life and intergenerational learning

APPENDIX D: VOLUNTEER SURVEY

Volunteers are an integral part of the Interactions Face-to-face: Video conferencing initiative. Your volunteer experience and feedback is important. Information about your experience and personal observations during this three-month video conference study will contribute to understanding and has the potential to make future video conferencing projects or services more effective for the elderly, particularly for long-term care residents. All replies will remain confidential. If you have any questions or want to discuss information in the survey, please contact the researcher, Sherry at -----. The completed survey can be dropped off at the Volunteer Services Office.

Background:

How long have you been a volunteer for this LTC community?

How did you become involved with the video conferencing study?

Before this study, to what extent were you aware of video conferencing? Did you ever participate in a video conference?

Interactions:

Describe your involvement/contact with the video conference resident participants.

Did you have contact with the resident participants outside of the video conferencing experience? If so, in what ways?

What was the extent of your contact with the family members of these residents?

Technology Enhanced Interactions:

What do you think about the chosen video conferencing equipment (D-link's i2eye DVC-1000)?

What suggestions do you have to enhance the video conferencing experience for the residents and their family or friends?

As a volunteer responsible for assisting residents with the video conference process, do you feel you received enough training and technical support?

Outcomes:

What have you learned or gained by being involved in this study? How have you grown?

What did you like or dislike about volunteering for this three-month study?

Would you recommend video conferencing to others?

What is your perception of elderly persons using modern technology like video conferencing equipment or computers? Has your perception changed in the past three months?

Comments:

APPENDIX E: ETHICS APPROVAL



UNIVERSITY OF SASKATCHEWAN
Behavioural Research Ethics Board (Beh-REB)

NAME: R. Regnier, Educational Foundations - Indian and
Northern Education Program - Adult and Continuing
Education
Sherry Klymyshyn

Beh 05-196

DATE: 19-Sep-2005

The Behavioural Research Ethics Board (Beh-REB) has reviewed the Application for Ethics Approval for your study "Interactions Face to Face: Intergenerational Video-Conferencing with Long-Term Care Residents" (Beh 05-196).

1. Your study has been APPROVED.
2. Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Committee consideration in advance of its implementation.
3. The term of this approval is for 5 years.
4. This approval is valid for one year. A status report form must be submitted annually to the Chair of the Committee in order to extend approval. This certificate will automatically be invalidated if a status report form is not received within one month of the anniversary date. Please refer to the website for further instructions
<http://www.usask.ca/research/behavrsc.shtml>

I wish you a successful and informative study.

A handwritten signature in black ink, appearing to read "Valerie Thompson", written over a horizontal line.

Dr. Valerie Thompson, Chair
Behavioural Research Ethics Board (Beh-REB)

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