ATHABASCA UNIVERSITY

INFORMAL LEARNING:

A STUDY OF ADVOCACY GROUPS AND THEIR USE OF TECHNOLOGIES

BY

PATRICIA FAHRNI

A thesis submitted to the

Athabasca University Governing Council in partial fulfillment

of the requirements for the degree of

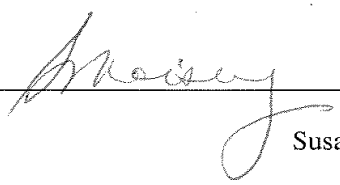
MASTER OF DISTANCE EDUCATION

Athabasca, Alberta

October, 2006

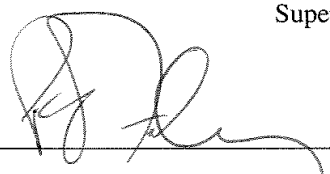
ATHABASCA UNIVERSITY

The undersigned certify that they have read and recommend to the Athabasca University Governing Council for acceptance a thesis "Informal Learning: A Study of Advocacy Groups and their Use of Technologies" in partial fulfillment of the requirements for the degree of MASTER OF DISTANCE EDUCATION.



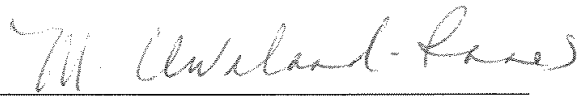
Susan Moisey, Ph.D.

Supervisor



Patrick J. Fahy, Ph.D.

Committee Member



Marti Cleveland-Innes, Ph.D.

Committee Member

Date: October, 2006

DEDICATION

This work is dedicated to the people who come together to talk about important ideas and act for social justice, and to the friends and families who support their actions.

> "I recall a wise woman saying at a conference I attended that effective advocacy often works like drops of water falling on a stone. It might take a lot of drops, but it will eventually leave a mark."
>
> Study participant: Document P34:0090-0091

ABSTRACT

Informal learning, now greatly supported by information and communication technology, is an area of interest for research. Researchers examine learning outside of formal structures; examples include workplace learning, communities of practice, and social communities. However, there is little research on social justice learning. Having been swept from formal institutions by the "neo-liberal broom," social justice learning takes shape among groups of adults coming together in the community. This study explored the informal, participatory learning of such groups. A qualitative approach using interview, document, and observational data was chosen to explore how five informal advocacy groups used information and communication technology to come together, build knowledge on their issues, and make their voices heard. Grounded theory was used to interpret study results and generate theory describing informal learning in loose, lateral, changing networks. Advocacy groups and their use of technologies in informal learning are described. Study findings underline the importance of access to information and communication technology and recommend strategies for learning informally and for sustaining informal learning groups. The heart of the theory, "Water Flowing around Rock" provides a metaphor for the advocates' task of making their voices heard despite barriers. Study findings constitute a hopeful demonstration of widespread, informal participation in democracy through the use of information and communication technology.

TABLE OF CONTENTS

INDEX OF TABLES

INDEX OF FIGURES

CHAPTER 1

INTRODUCTION

What can be more typically human than a group of people getting together, talking about something that's got their backs up, and then doing something about the problem? To illustrate, consider the scenarios below.

- October, 1916: The end of the Langley division road. Janis McPherson had seen no one but her immediate family for weeks on end. Her days were filled with child-rearing, house and farm chores. She had little time for leisure, but while canning over the last few days, she had been mulling over the extension of the waterline to the proposed community hall and had come up with a good idea. Her neighbour was due to pick her up next week to ride into Abbotsford for a meeting of the British Columbia Women's Institute. She'd bring forward her suggestion.
- December, 1944: South of Prince Albert, Saskatchewan. The closing words of the radio program had stuck in his brain. "Education for the people -- all the people. Education for action -- cooperative, responsible action. Education for change--inevitable and desirable change. Power to the people!"(Welton, 1987). That Watson Thomson could really lay it on. Bill checked his watch and estimated how soon he could get away that night. The four of them were meeting with the other district groups to prepare questions for the Wheat Pool guy due in next month.
- March, 2002: A Vancouver living room. The researcher writes her email address on a piece of paper and passes it along. A couple of dozen parents are planning a campaign to stop cuts to public education.

The scenarios above refer to the Women's Institutes of British Columbia, and the initiatives of Watson Thomson in Saskatchewan (cited in Welton, 1987), and the initial meeting of a public education advocacy group. All portray adults meeting together in spite of barriers of time and space and differences in education and culture. They are motivated by a shared goal that propels them from talk to social action -- a process of participatory democracy--and engage in a collaboration that can be understood to be in the scope of adult learning and informal learning.

Adult education in Canada is delivered through formal education in government-funded public institutions and corporate-funded private institutions, and as non-formal education in workplaces and in the community. Adult education has historically addressed learning needs in employment, consumer, leisure, and social (civic) areas. There is a stream of social justice learning that can be traced through Canadian adult education practice -- a stream that has had various influences on education systems.

Informal, participatory groups manifest principles found in adult education theory. In 1977, Malcolm Knowles used the term "andragogy" to describe theory and method that suited life-experienced, self-directed, socially-situated adult learners. Educators aimed for a learning situation that was generative and interactive, and incorporated what was known about the social, psychological, and political characteristics of their adult learners (Tough, 1979; Russell & Ginsberg, 1999). Educators studied how adults learned, what motivated their learning, and what kind of learning was the most meaningful. Constructivist learning theory -- based on the premise that learners construct knowledge based on what they already know and on their own experiences and relationships – also contributed to the accommodation of the more self-directed, autonomous learner. Critical constructivism includes the concept of

transformative learning (Mezirow, 2002). The core process of transformative learning is questioning assumptions through critical reflection: the result is a changed perspective. Mezirow studied the work of German social theorist Habermas (1971) who asserted that humans have three interests that are served by three types of learning:

1. an interest in controlling their environment which is served by instrumental learning;
2. an interest in understanding each other which is served by communicative learning; and
3. an interest in freeing themselves from ignorance through self-awareness, which is served by emancipatory learning.

Emancipatory and advocacy models are collective and participatory, and based in critical pedagogy (Horton & Freire, 1990). An advocacy model is provided by Freire (1970) who, working with workers in Brazil, defined a process of *conscientization* in which people become aware of the reality that shapes their lives and their ability to act to change that reality.

The groups under study are advocacy groups involved in participatory, informal learning that leads to action. In the face of the decrease in democratic participation in the last several decades (Putnam, 2002), and an inequitable distribution of the social capital (Coleman, 1988) that enables participation in democracy (Wuthnow, 1998), participatory models advocating democracy take on an increasingly growing importance. Adults engaged in participatory democracy generally do so outside of educational institutions through informal learning.

For adults engaged in social action, learning is collective: they need to meet and interact, a logistically difficult task. Their learning is generative: they need to pull together their resources, share their strengths, and build new knowledge--another organizational

challenge. They need to take action and have their voices heard, and for this they need communication media. Returning to the historical scenarios for a moment, note that all the learners described faced barriers -- barriers to access, to communication and interaction, to receiving and disbursing information, and to being heard and understood. Overcoming these barriers took tremendous motivation and commitment -- qualities arising from the initial frustration that sparked action. Adults involved in participatory democracy through informal learning face similar barriers.

There is a tool that facilitates interaction, provides systems for organization and research, serves as a communication conduit, and also overcomes many barriers adult learners experience. Widely applied in distance education, information and communication technology (ICT) can address problems of educational access, communication, interaction and knowledge building within the formal education system. Over the last few decades, ICT use in formal education systems has proved its capability to support learner interaction, to provide effective communication systems, and to organize vast amounts of information, but formal systems rarely support social justice learning. Spencer (1998) notes:

> Some also believe that new computer-mediated communications and telecommunications, that render borders meaningless, will result in a global culture and a world-wide environment favourable to corporate interests. In this belief, distance education is seen as both a process and a means to achieve these aims. . . . Can distance education be social education, or is it doomed to only serve new economic interests? The challenge for distance education is to include social learning within the delivery system. (p.115)

Outside of formal institutions, meanwhile, social justice learning is taking place. While there is a large body of research on ICT in formal learning, little research exists on the use of technology in informal learning. “Lack of research about informal adult learning on the

Internet is a barrier to fully understanding the extent and type of learning that is taking place." (Gray & Richards, 2000)

Purpose and Research Questions

The purpose of this study is to explore how advocacy groups utilize ICT to support informal learning for social justice. Accordingly, the study will explore the following research questions:

1) What role, if any, does technology play in the formation and structure of advocacy groups?
2) Do informal advocates access ICT? If so, how?
3) Do informal advocates experience barriers to ICT use? If so, what interventions and strategies, if any, are used to overcome barriers to ICT?
4) Are advocacy groups currently using ICT? If so -
    a) How do informal advocates learn how to use technology?
    b) What functions does technology serve for informal advocates?

Importance of the Study

Lack of participatory democracy is a significant problem because it involves issues of control and ownership, as well as equity and democracy. Bereiter (2002) notes that it is ironic that educational technology, a tool so suited to participatory democracy, is controlled in formal education institutions under government or corporate aegis. Research regarding the use of technology for participation in democracy has not been a priority for formal educational institutions or for the governments and corporations that control provision and use of educational technology. Groups involved in informal learning for social justice, such

as the advocacy groups of the study, often work in competition with large formal systems with extensive infrastructure. The ability to access and use the communicative and collaborative affordances of ICT is necessary to ensure diverse voices are heard. This study is justified if it adds to the research in ICT use in participatory democracy and if it provides informal learners with a model of using technology successfully as a tool for advocacy.

Moreover, the answer to the problem may be significant to the design of distance learning. The credit-granting function of formal education institutions and the need to measure accountability has tended to result in a default to teacher-controlled methodology. Gray (1999) observes that "while education technology has the potential for delivering new modes of learning, vested interests (including institutions of higher education) may act to ensure that this occurs only under their control" (p.122). Informal learning, on the other hand, is free from such constraints: hence the methodology generated by autonomous learner-groups may add to the understanding of ICT-mediated participation in a group.

Definition of Terms and Assumptions of the Study

To clarify the domain of the study, it is important to understand several terms and concepts. What is informal learning? Can advocacy group members be considered informal learners? How does the specific focus on social justice learning limit the study? Finally, considering that the term "technology" is a synonym for, simply, a tool, rooted through Greek to Sanskrit *takshan*, meaning to cut wood (Skeat, 1963), what is the specific ICT explored in the study?

Since 1998, the National Research Network on New Approaches to Lifelong Learning (NALL) has been studying adult learning in Canada. One NALL researcher describes informal learning broadly as "anything we do outside of organized courses to gain significant

knowledge, skill or understanding" (Livingstone, 2002). Others emphasize the context, differentiating between non-formal education locus in "school-like settings" and the locus of informal education in "daily life and work" (Russell & Ginsburg, 1999). Sawchuk (2003) contributes an additional characteristic to the definition of informal learning, contrasting it to formal learning that is state-operated and credentialized, and to non-formal learning that is not directly controlled or credentialized by the state: "Informal learning does not centre around a structured classroom or credentials. It is composed of self-directed or collectively directed learning projects." (p. 638). Regarding the locus of control, Jarvis (2000), differentiates between "education" and "learning":

> Education has long been seen as having the monopoly of control of the people's learning; it has acted as a government agency, a public institution, and it has been an agency of social and cultural reproduction. By way of contrast, learning is private and less amenable to control. (p. 345)

The term "informal learning" is used in this study to describe the learning of adults outside of classrooms and away from institutional control. The study participants are informal learners because they gain the "significant knowledge, skill or understanding" in order to address their problem and because they control their own learning (or "collectively directed learning project") in an informal setting.

Further, the advocacy groups of the study are considered informal learning groups as group membership requires participation with diverse connections and networks, both within their own groups and in the larger network. Is the unit of analysis the individual learner or the informal learning group? Although Tough (1979) characterized individuals' self-directed "learning projects" as informal learning, more recent literature recognizes that ICT-supported informal learning occurs amidst various levels of diverse connections and relationships with others (Wenger, 2004; Cross, 2004; Siemens, 2005). Informal learning theorist Cross (2003)

describes informal learning as “an act of participation”. Wenger, White, Smith, and Rowe (2005) describe the relationship between “communities of practice” and individuals as follows: “Togetherness is a property of communities, but it is something that is generated and experienced by individual members.” (p. 2). In a study of ICT-supported informal learning, it is difficult to separate the individual from their “community” or group. The study explores advocacy groups as informal learning groups and analyses how members connect, interact, and change their environment – processes dependant on participation in the group.

How does the specific focus on social justice learning delimit the study? First, the advocacy groups of the study are viewed through an emancipatory lens. In this paradigm, social justice learning includes the elements of praxis, a participatory orientation, and a goal of action. There are various methods and approaches that share the essential elements of participatory democracy: dialogical-libertarian action (Freire, 1970), adult learning projects (Knowles & Tough, 1979), popular education (Russell & Ginsburg, 1999; Beder, 1996), action research (Greenwood, 1998), study circles (Brophy, 1999), learning circles (Suda, 2001), and the participatory action groups found in Canadian adult education (Welton, 1998). It is these participatory models that are examined in Chapter 2 and that inform the analysis of the groups of the study. Second, the relationship of individuals to networks in democracy can be understood using the concept of social capital. The concept was described in 1916 when American social reformer L.J. Hanifan lamented the “family isolation and community stagnation” of Appalachian towns and identified civic engagement as necessary to sustain democracy and development. He stated, “If he (a citizen) comes into contact with his neighbours, and they with other neighbours, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality

sufficient to substantial improvement of living conditions in the whole community" (cited in Putnam, 2002, p. 4). Sociologist James Coleman (1988) used the concept of social capital to explain his theory of the social context of education and Schuller (1999) describes three aspects of the relevance of social capital to adult education, as follows:

1. It focuses on the qualities of relationships rather than on individual achievements and attributes;
2. It encourages us to look at education and learning systems in terms of networks rather than hierarchies;
3. It builds into the analysis an emphasis on the informal side of learning, as compared with a preoccupation with institutional learning. (p. 9).

The focus on social justice learning limits the scope of the study to informal learners grouped in non-hierarchical networks that use participatory methods with a goal of social action.

The technology explored in the study is any technology that meets the needs of the advocacy groups, but with a focus on ICT. Over the last decades, electronic ICT has proven its capability in formal education to support learner interaction, to provide effective communication systems, and to organize vast amounts of information. Gray (1999) speculated that "if the basis of lifelong learning is self-directed learning, then the Internet could probably be classified as one of the most powerful and important self-directed learning tools in existence" (p. 119). However, while informal learning groups in Canada likely have some access to computers and to the Internet, they do not have the structured support that formal education provides in the use of these technologies. Therefore, outside of this structure, how can electronic communication tools such as email, asynchronous conferencing, synchronous audio-conferencing, and web publishing be used, accessed, and

supported within the context of informal learning? This is the crux of technology use that will be studied, although any technology used effectively by the groups to engage in informal learning will be included in the study.

Government and industry bear the high front-end cost of developing and implementing technology and "call the tune" regarding its use. Research and development in distance education tends to address the needs of formal education funders – hence little research is available regarding the use of technology in informal learning. Do formal public education systems have a role in supporting participation in democracy? On Hamilton Street in Vancouver is a modest, two-story, 1900s building that looks reproachfully across the street to the doors of a large community college. Written in huge brass letters across its façade is the prophetic phrase: "Unlimited growth increases the divide."

Although there are many examples of adult groups learning informally and acting for social justice in Canadian adult education history, there are few documented current examples to be found now. This is a kind of social oppression. Freire (1970) argues that people come to "*conscientization*" through the study of historical and political context. In the current political context, social justice learning appears to occur in the informal system, not through the formal education system. The literature review in Chapter 2 takes a historical view, describing informal social justice learning and participatory models from the past as well as contemporary examples with an eye to necessary components for success. It also discusses informal adult learning and the effect of the Internet on informal learning groups. However, as there is little research in the use of ICT by informal social justice learning groups, this study is an exploratory study that hopes to discover how adults engaged in informal advocacy groups use technology to reach their goals.

Organization of the Thesis

The remainder of the thesis consists of Chapter 2, which presents a review of literature on informal learning and participatory models and literature on technology use in informal learning. In Chapter 3, the study methodology is described and discussed. Study results are presented and discussed in Chapter 4, and a theoretical model is proposed. Finally, in Chapter 5, conclusions are drawn and recommendations for further research are made.

CHAPTER 2

LITERATURE REVIEW

Introduction

In this study of informal social justice learning, the focus is on participatory models and methods. The informal participatory model, which mimics civic participation as it occurs in human society, is related to democratic movements. A persistent model is discussed in detail (Suda, 2001; Welton, 1987; Welton, 1998; Horton & Freire, 1990; Rothstein, cited in Putnam, 2002; ISC, 2004; SCRC, 2005, Beder, 1996; Tough, 1979; Angus, 2001). To set the informal, participatory learning of advocacy groups in a larger framework, literature related to informal adult learning (Knowles, Holton & Swanson, 2005; Tough, 1979;Cross, 2003; Horton & Freire, 1990; Brockett & Heimstra, in Gray, 1999; Gray, 2000; Jarvis, 1999; ISC, 2004; Menzies, 2005), the contrast of informal and informal structures (Seimens, 2005; Gotta, 2004; Mosher, 2004; Seimens, 2004; Menzies, in Rose 2004; Salter, in McCaughey & Ayers, 2003; Atton, 2004), learning groups' formation and structure (Weick, 1979; Coleman, 1998; Jarvis, 2000; Russell & Ginsburg, 1999; Preece, 2002; Wenger, 2005; Wenger, White, Smith & Rowe, 2005; Nichani, 2000), and participation and dialogue (Tough, 1979; Ettling, 2001; Naples, 1998; Cross, 2003; Wenger, White, Smith & Rowe, 2005; Shenk, 1997; Angus, 2001, Menzies, 2005) are discussed. Finally, informal groups using ICT for social change are discussed, including early experiments (Goodman & Kiousis, 1998), the effect of Internet-based technology (Shenk, 1997; Siemens & Cross, 2005; Siemens, 2006; Gray, 1999; Menzies, in Rose, 2004; Siemens, 2005; Hampton, 2003; Wellman, 2001; Hampton & Wellman, 1999; Angus, 2001), as well as more recent literature on Internet technology use in social activism (Shenk, 1997; McCaughey & Ayers, 2003; Van de Donk, Loader, & Rucht,

2004; Atton, 2004). The chapter concludes with a summary of what is known and unknown about the use of technology in informal learning, and suggests the potential contribution the study may make to this area.

A persistent model

The study demonstrates an interest in participatory models of learning and follows a democratic education movement from Scandinavia to the Americas and to Canada specifically. Common elements are found in the existing social conditions, in the motivation of learners, in the method used to learn and in the effect of the learning. The common elements of early and current models reveal a framework for a learning method for civil society. The informal participatory model is "the study circle."

Study circles in Northern Europe

Folkbildning, a Swedish word, describes a main concept of the Scandinavian popular education movement -- that education and knowledge for all helps society as a whole. Government policy on adult education in Sweden has, for more than a century, recognized the importance of popular education and views popular education as essential to a healthy democracy. A 1993 government bill from Sweden rationalizes resources for popular education as follows, because it

- stimulates democracy, equality, and international solidarity and understanding;
- starts from the individual's own voluntary search for knowledge;
- is characterized by democratic values and cooperation;
- aims to strengthen individuals' ability to influence their own life, and to be able, together with others, to change society in accordance with their values and ideals;

- helps provide all, but particularly the educationally disadvantaged, with good basic knowledge;
- helps stimulate further search for knowledge." (Suda, 2001, p. 4)

One form of *Folkbildning* in Sweden is Folk High Schools, run locally by popular movements and non-government organizations and commonly following problem-oriented and thematic studies. The other form of popular education used for more than 100 years in Scandinavia is the study circle. Study circles are comprised of five to 10 people who use dialogue to explore relevant concepts using a democratic and participatory model. The goal of the specific study circle arises from group members' experience. One of the group acts as facilitator or coordinator; resources and study materials are gathered or generated in an organic way; a typical study session lasts 20 hours and involves seven meetings; group members work toward the goal through self-paced collaborative dialogue, cycling through a pattern of study of new knowledge, to reflection, to discussion and eventually to action or to satisfaction with the resulting learning. The study circle provides a framework for informal learning. The circles are not always successful, of course. Inability to reach agreement on process, passive members, and inept facilitators all contribute to study circle failure. To succeed, group members need to commit to the philosophy underpinning the practice -- commitment to a collaborative, democratic, participatory and inclusive process. Study circles thrive in a context of democratic societies with a goal of increasing democratic participation and learning.

Study circles in North America

The Scandinavian *Folkbildning* movement has informed participatory democracy initiatives in the Americas. Examples include the Antigonish Movement in Nova Scotia, the Folk High Schools of Myles Horton in Tennessee, the work of Freire in Brazil, the work of

Watson Thomson in Alberta and Saskatchewan, and the College established by Saskatchewan and Manitoba Cooperatives to serve the needs of Prairie co-ops.

The Antigonish Movement was a successful program in social action based on adult education and developed in the early 1900s at St Francis Xavier College and, after 1928, through the Extension Department of St. Francis Xavier University, Nova Scotia. Father Jimmy Tompkins, Father Moses Michael Coady, Dr. Hugh MacPherson, and A.B. MacDonald were leaders of the movement that promoted education for social action among the rural poor -- farmers, miners, fishers -- affected by industrialization, urbanization and the resulting Depression. Lotz and Welton (cited in Welton, 1987) acknowledge the following Movement influences: the British Workers' Educational Association (WEA), Bishop O'Dwyer's work on rural poverty in Ireland, the Danish Folk School concept and the Swedish Discussion Circle Approach. "The genius of the organizers of the Antigonish Movement lay in the way in which they helped to channel frustration and excess energy at the grassroots level into channels that resulted in both individual and structural change" (p. 99).

After studying Danish Folk Schools in 1931, Myles Horton based the first Highlander Folk School in Tennessee on the concept and went on to demonstrate how participatory education links to social change. Paulo Freire's work with illiterate poor in Northern Brazil in the 1940s and 1950s was also participatory and emancipatory. As older men, Freire and Horton noted how early participatory educators made the mistake of thinking that to effect social change, a political process of organizing and mobilizing had to take place before the educational part was addressed. As evident in the quotation below, Freire (cited in Horton & Freire, 1990) sees political process as an educational process at the same time.

> Education is before, is during, and is after. It's a process, a permanent process. It has to do with the human existence and curiosity (p. 118).

Furthermore, Freire thought this process could occur inside the formal education system, arguing that although "the ruling class" expected the system to reproduce the dominant ideology, other more democratic and universally beneficial ends were possible. Horton, on the other hand, believed education for social change could not occur in the formal system, and noted the participatory method of Highlander was not recognized as valid by the mainstream formal system. Formal educators accused Horton of imposing his ideas on adults who came to Highlander. In response to such accusations, Horton (cited in Horton & Freire, 1990) recalls asking the following:

> I said, "Do you impose your ideas?" "Oh, no we're very careful not to impose our ideas." And I said, "Well you have one problem I don't have. You're such powerful teachers that if you even breathe what you believe, it would influence everybody. I've always been glad I could get somebody to pay attention to my ideas, just to share them with them." (p. 104)

As a teaching strategy, Horton did not discuss his own ideas unless asked directly. This strategy is consistent with participatory education theory. Freire, (cited in Horton & Freire, 1990), again linking political organization to educating, describes the activist/educator role as "illuminating the issues coming from the people" and as follows:

> If they are good in being involved in participatory research, they necessarily are grasping some issues that have to do with the expectations and frustrations of the people, some issues that have to do with people's lack of knowledge. (p. 122)

Like Welton's (1997) observation regarding the Antigonish Movement, both Freire and Horton tied "people's frustrations" to political action and linked "people's expectations" to democracy (p. 145). According to Horton, the political process was a learning process, and it was the participatory processes that most effectively lead to increased social capital and greater democracy. In this vein, Horton asserted the following:

> The more people participate in the process of their own education, the more people participate in defining what kind of production to produce, and for what and for why; the more people participate in the development of their selves. The more people become themselves, the better the democracy. The less people are asked about what they want, about their expectations, the less democracy we have. (p. 145)

Horton recalls the period when Highlander started as being a time of radical ferment and creativity, and remarks how the several new, experimental schools existed outside of recognized education communities, and how there was little acceptance of informal education. He admitted, however, "that all along there have been individuals in universities all over the United States and Canada with whom we worked comfortably" (Horton & Freire, 1990, p.204). One of those individuals may have been the Canadian, Watson Thomson.

In the 1930s, Watson Thomson applied the Scandinavian *Folkbildning* model to the Alberta School of Community Life within the University of Alberta Extension Department outreach programs. He also established chapters of the Workers' Educational Association (WEA). In 1944, after the Co-operative Commonwealth Federation under Tommy Douglas was elected in Saskatchewan and needed to combat the suffocating effects of the inherited bureaucracy on promised reforms, Thomson looked "to use a campaign of grass-roots radical adult education" (Welton, 1987, p. 154). In the University of Saskatchewan's new Division of Adult Education and with a mandate from the provincial government, Watson Thomson and his team developed government policy for adult education and planned a "Provincial Study-Action Program." Welton (1987) describes the program. At the base were participatory, dialogical study groups. The program ran through district units, with the district supervisor charged with establishing a nuclear system of discussion and study groups. Thomson valued small group interaction in a participatory model as effective for learning.

Welton (1998) describes the structure of the "citizen conferences" and the role of the experts brought in to provide information, as follows:

> Thomson explicitly rejected the notion that specialists were there to deliver their words, leaving the people to criticize or go home and pick the words to pieces. This was not a way to build "true democracy." Those who were not specialists had a right to have their say…. The heart of the citizen's conferences, from Thomson's viewpoint, lay not with the large assembly but in the small discussion groups. (p. 161)

According to Thomson, a study group or discussion group had two possible results: action via a practical project or action via further study. Thomson ploughed forward with his program, undaunted by growing anti-socialist propaganda. Eventually, however, internal party politics resulted in minimizing support for his initiative. The Provincial Study-Action Program ended in 1946, but not before giving a great many Saskatchewan people a taste of "true democracy."

In 1943, the Federation of Southern Manitoba Co-operatives used study groups as a preferred method in the education of managers and employees. MacPherson (cited in Welton, 1987) describes the link as follows:

> The St. F.X. program had been publicized in western Canada by George Keen of the Co-operative Union of Canada in the thirties and by Catholic priests in the 1930s and 1940s. By 1945, too, there were several books and articles about the Antigonish movement available for western readers, and the co-operative press across Canada publicized its successes. (p. 173)

A decade later, adult educators Harold Chapman and William Baker collected research for the Royal Commission on Rural Life. As well as inviting submissions from organizations, Chapman organized a tour of the province and devised a format of discussion groups reporting back to the main assembly. MacPherson (cited in Welton, 1987) describes the success of the discussion group strategy as contributing to Chapman's theory of adult education, saying, "This experience was especially productive for the Commission and convinced Chapman that adult education was very much a process whereby information had

to be carefully pitched to the learning level of the group member and learning took place in discussion sessions on important topics among people with specific interests." (p. 177). Chapman's (1955) theory was organized under five principles:

1. Problems need to be considered important to those expected to solve them;
2. Start where people are -- not where we think they are or would like them to be;
3. A person cannot transfer his knowledge and skill to another -- the other must go through a learning process;
4. Significant learning takes place when facts and information are integrated into the experience of the learner;
5. A person feels more responsible for what he helps to create.

Chapman's theory covers the participatory learning aspects of intrinsic motivation, learning grounded in the experience and local context of the learner, and the need for "a learning process" (transformation). However, although his theory was sparked by the success of discussion groups, he does not include a principle respecting the role dialogue and interaction play in adult learning. In participatory learning, learning is a process of dialogue.

The informal participatory model is evident in past informal adult learning in Canada. The study circle model continues to be used in Scandinavia, in Australia (Suda, 2001), and in North America. Rothstein (cited in Putnam, 2002) noted the growing incidence of study circles in Sweden involved "an astonishing 40 percent of the adult population." Rothstein links study circle participation to broader civic involvement, and notes that half the cost of study circle practice is funded by the government. The International Federation of Workers' Education Associations (IFWEA) (ISC, 2004) uses the study circle model in an international education project. (The Workers' Education Association was formed in the UK in 1903 and continues to be committed to "free and voluntary education work according to the principles of solidarity and cooperation, justice and equality, democracy and freedom" (p. 5). The work

of Thomson in Alberta in the 1930s involved the WEA.) The project, International Study Circles (ISC), is part of a larger effort to address aspects of globalization. The core principles of ISC are stated in the ISC Manual as follows:

> IFWEA supports a democratic and participatory approach to workers' education. The basic philosophy is that the education is free and voluntary. The education process is learner-centered and democratic. There is no "teacher." Learning takes place through discussion and dialogue based in course participants' experiences. (p. 9)

Later in this chapter, the ISC example is examined. The study circle model continues to be used by social justice groups. One online organization using the model is Study Circles Resource Centre, an American non-partisan, non-profit organization supporting community self-development. Its core principles are as follows:

1. Involve everyone. Demonstrate that the whole community is welcome and needed.
2. Embrace diversity. Reach out to all kinds of people.
3. Share knowledge, resources, power, and decision making.
4. Combine dialogue and deliberation. Create public talk that builds understanding and explores a range of solutions.
5. Connect deliberative dialogue to social, political, and policy change. (SCRC, What Communities Do section, 1, ¶3)

Like the "study circles" of the Antigonish Movement, of the Highlander Folk School, and of the Provincial Study-Action Program, current groups using the participatory model of the study circle incorporate democratic processes. The common elements in both historical and current participatory learning are what Beder (1996) describes as the "three essential and integrated components" of popular education: praxis, a participatory orientation, and the goal of action.

Praxis is "a process of collective critical reflection which results in an interaction between theory and practice" (Beder, 1996 p. 74). Praxis is found in the literature as *conscientization* (Freire, 1990) and the process of turning frustration into expectation (Horton

& Freire, 1990; Thomson, cited in Welton 1998)). The literature (Coady, cited in Welton 1987; Horton & Freire, 1990; and Thompson, cited in Welton 1987) shows that motivation for learning originates in peoples' frustration (Horton & Freire, 1990, p. 122; MacPherson, cited in Welton 1987) and that learning content arises from the learners' experience.

- "It starts from the individual's own voluntary search for knowledge"(Suda, 2001);
- "The less people are asked about what they want, about their expectations, the less democracy we have."(Horton & Freire, 1990) -- Horton described the strategy of not discussing his own ideas, but waiting for ideas to come from the learner;
- "People who are not specialists have the right to have their say." (Thomson, cited in Welton 1987);
- "Start where people are." (Chapman, cited in Welton 1987);

Praxis can be related to informal adult learning, especially to social justice learning. Adult education theorist Tough (1979) names adults' desire to change their environment as a main motivation for learning, and Angus (2001) identifies the right to decide which issues are important as a primary democratic right.

The second component is a participatory orientation. Individuals group together to learn about a common issue -- learning is collaborative and social. Beder (1996) makes the distinction "that groups, not individuals, are the object of education, so that the education is conducted by, with and for participants" (p. 74). Informal learners are motivated by "the desire to participate in a community of practice, to become and remain a member" (Cross, 2003). A fuller discussion of group structure and participation follows in the next section.

Beder's third element is an orientation toward advocacy and action. The study circle process ended in "action or satisfaction." According to the 1993 Swedish government bill,

popular education "aims to strengthen individuals' ability to influence their own lives, and to be able, together with others, to change society in accordance with their values and ideals" (cited in Suda, 2001), and such democratic participation is valued and partially funded by the government—a fact used by Rothstein (cited in Putnam, 2002) as "powerful evidence against the thesis that the welfare state necessarily undermines social capital" (p. 375). Thomson (cited in Welton, 1987) saw discussion groups as having two possible results: an action plan or more study. Sawchuk (2003) claims the goal of action for informal learning as follows: "Informal learning is collaborative and social, and leads to action" (p. 632).

The persistency of the study circle model is an indicator of its effectiveness as a model for informal adult learning groups such as advocacy groups, the focus of this research. The next section sets informal advocacy groups within a wider framework and discusses informal learner autonomy and its link to relevancy, motivation and participation, learning groups' formation and structure, and participation and dialogue.

Informal adult learning

Knowles, Holton and Swanson (2005) outline core adult learning principles as follows:

- The learners' need to know (why, what, and how)
- Self-concept of the learner (autonomous and self-directing)
- Prior experience of the learner (resources and mental models)
- Readiness to learn (life related--a developmental task)
- Orientation to learning (problem-centered and contextual)
- Motivation to learn (the intrinsic value and personal payoff) (p. 27)

An emphasis on individual differences in perspectives of psychology, developmental perspectives, and life-span development has been a recent focus. For example, an above principle is the learner's self-concept as autonomous and self-directing: adult learners

demonstrate a range of self-directedness dependent on factors such as learning style, personality, prior experience, or current life situation. Among differences in perspectives of psychology are cognitive differences, personality differences and differences in prior knowledge. Developmental differences involve learning how to learn -- focusing on broadening the learning capabilities of learners so that they can more easily adapt to a wide range of learning situations such as those found in job situations. Life-span development addresses the physical, cognitive, and personality or social changes in adult development.

Informal learning extends beyond adult learning theory as can be seen in the principles used by theorists applying informal learning to organizations. The principles listed below, from the now-defunct Institute for Research on Learning at Menlo Park, California, frame individual learners as inseparable from their context, like Knowles, Holton and Swanson (2005), but emphasize participation and engagement. (Note: The term “community of practice,” used in the 1999 citation below, has since taken on a more specific meaning regarding Wenger's work on online networks.)

- Learning is fundamentally social. Successful learning is often socially constructed and can require slight changes in one’s identity, which make the process both challenging and powerful.
- Knowledge is integrated in the life of communities. When we develop and share values, perspectives, and ways of doing things, we create a community of practice.
- Learning is an act of participation. The motivation to learn is the desire to participate in a community of practice, to become and remain a member.
- Knowing depends on engagement in practice. We often glean knowledge from observation of, and participation in, many different situations and activities. The depth of our knowing depends, in turn, on the depth of our engagement.
- Engagement is inseparable from empowerment. We perceive our identities in terms of our ability to contribute and to affect the life of communities in which we are or want to be a part.

- Failure to learn is often the result of exclusion from participation. Learning requires access and the opportunity to contribute.
- Learning is a natural part of being human. We all learn what enables us to participate in the communities of practice of which we wish to be a part. (cited in Cross, 2003)

Participation in a "community" is essential to the kind of informal adult learning undertaken by the groups under study -- advocacy groups involved in participatory, informal learning that leads to action. This aspect is discussed in a broader framework that includes a discussion of informal learner autonomy and its link to motivation, relevancy, and participation; formal and informal structures; control of access to technology; learning group formation and structure; and participation through dialogue. Examples from the literature are examined.

Autonomy and link to relevancy, motivation and participation

Adults' motivation to learn is based on intrinsic value and personal payoff (Knowles, Holton & Swanson, 2005). Tough (1979) also identified increased confidence and self-esteem as a benefit of learning -- the learner "reduces the gap between his actual self (as he perceives it) and his ideal self" (p. 56). Participatory learning examples showed motivation originating in "peoples' frustration" (Horton & Freire, 1990). Tough associated motivation for informal learning with desire to change (themselves or their environment) and setting their "own directions and goals for change" (p. 5).

> Changes in adults are a necessary part of social change: the major problems of society cannot be solved without certain changes in people. Without an emphasis on helping people to learn or change, how can we move toward peace, economic development, productivity, zero population growth, more effective government, better cities, widespread physical and mental health, satisfactory race relations -- and away from poverty, crime, urban problems, and pollution? (p. 31)

Further, Tough (1979) recognized the importance of learner control in engagement and meaningful learning. He also predicted the main benefit of technology for adult learning would be unrestricted, learner-controlled interaction. Over three decades ago, he referred to the development of a computer dialogue program that would "provide the richest possible student-system interaction where the student is free to construct natural language responses, ask questions in an unrestricted mode, and in general exercise almost complete control over the sequence of learning events" (p. 126). Knowles, Holton, and Swanson (2005) also link learner autonomy to relevancy, motivation and participation. They studied leaders in management and education and characterized leader behaviours in "current education" as "controlling" and leader behaviours in "significant experiential learning" as "releasing". They list four leader assumptions about human nature and behaviour relevant to significant experiential learning as follows:

1. Human beings have a natural potentiality for learning.
2. Significant learning takes place when the subject matter is perceived by the student as relevant to his own purposes.
3. Much significant learning is acquired through doing.
4. Learning is facilitated by student's responsible participation in the learning process.
(p. 257)

Motivation for informal learning originates in the learner environment and learner experience and entails a desire to change self or environment (Tough, 1979). Relevant learning content and processes are integrated in the life of communities: learning is problem centered and contextual (Knowles, Holton, & Swanson, 2005). Informal learning depends on engagement in practice and requires access to participation (Cross, 1999, cited in Cross, 2003). Significant learning results from "releasing" not "controlling" approaches. Informal

learning is directed by the learners, connected to the learners' world, not separate from it, and entails engagement and participation across connections.

Participation undercut by control of technology

One difference between formal and informal systems is the power relationship as demonstrated by control. If learner autonomy is a critical factor in motivation, engagement and level of participation (Tough, 1979; Cross, 1999 cited in Cross, 2003; Knowles, Holton, & Swanson, 2005), then decreasing learner autonomy by controlling learning processes may lead to less successful learning. Earlier in the chapter, Horton argued with Freire (Horton & Freire, 1990), contending that participatory learning could not occur in the formal system because the learner-centred process "was not recognized as valid." Control of learner autonomy in current times may mean control of the technology that supports participation. Although Brockett and Hiemstra, in 1991, called the Internet "one of the most powerful and important self-directed learning tools in existence" (cited in Gray, 1999, p. 119), there remains a lack of research and development of theory in the extent and type of learning taking place in adult informal learning on the Internet (Gray, 2000; Jarvis, 1999). Gray (2000) argues that the Internet does not necessarily lead to a learner-dominated mode, stating "Given, however, that most formal education, even Internet delivered, will still be provided by educational institutions, it seems likely that forms of teacher control will still persist. Even seemingly democratic, interactive facilities such as email forums are often dominated by tutors rather than students" (p. 122). Formal education systems also control access to technology -- student registration and fee payment triggers access to the technology for the contracted period. As informal learning systems rely on learner autonomy as a motivator and factor in participation (Tough, 1979; Cross, 2003), control of learner access to ICT would

limit participation in a project such as the International Study Circles (ISC) example described below.

Example: International Study Circles

Issues of control and access affect the success of the following project. The study circle model continues to be used as an international model by the International Federation of Workers' Education Associations (IFWEA) (ISC, 2004). Although the ISC model relies on Internet technology, the document reports that "a sharp debate" took place over the use of technology when first setting up ISCs. The question was asked: "Does the use of the Internet undermine the democratic participation of the course participants?" (p. 11). The debate reflected the following common misgivings about ICT use listed below.

- "Putting individuals behind screens" would remove them from "the benefits of collective experience." Menzies (2005) suggests "integrating personal stories" combats alienation--a strategy already recognized as an element of participatory learning by the ISC.
- Unrestricted access to information and ideas would overload group members who would then lose focus on the learning objectives. If the learning objectives derived from group members, the focus would likely not be lost, but group members may be distracted from imposed learning objectives by information and ideas more meaningful to them.
- Technology would direct the education. If, as stated in the ISC mandate, "Learning takes place through discussion and dialogue based in course participants' experiences," then technology could not direct the education. Only control of technology access, including the ability to use it, would direct the education.

The outcome of the debate was that the ISC model uses the Internet minimally. The ISC guide clarified the use of the Internet in the following statement:

> Although study group members ultimately communicate with other groups through the Internet, they need have no computer or Internet skills. The local group discussions take place between course participants directly, and the program is not an Internet chat room. Only the outcomes of the discussions are reported on the website. If course participants do not desire computer access, or if an organization only has limited access to an appropriate computer, then only the facilitator needs to have the use of the computer with Internet access. In this case the computer may be located in entirely separate place from the venue at which study circle sessions are held (p. 16).

The Internet is used to provide access to operational materials (such as the ISC Manual) and also to publish materials created by the local Study Circles. Resources of an ISC include the following: a full-time project officer, the design and management of an ISC website by "someone with the appropriate skills," and facilitator access to a reliable computer with electronic mail and the Internet. The IFWEA website is used to display past examples of ISCs, and to access ISC reports which are posted as completed during a session.

Feedback to the project is telling. A facilitator report (ISC, 2004, p. 29) remarks that a main benefit to group members was the international communication dimension (through reading each others' reports via website), but "there was however not enough of it through exchanges/debates." The facilitator reports group members were "surprised" at commonalities, surprised that assumptions were broken down, and surprised that they wanted to interact more. Because it was the facilitator who entered the report, there was a concern that "the voices of the course participants across distance and language will not be heard" (p.30). Also, one language (English) was designated as the language of international communication, although local languages were used in individual ISCs. The evaluation notes main weaknesses in ISC practice as being the failure to integrate technology into local ISC sessions and the facilitator control limiting the possibility of meaningful and direct participation by the group members.

The example of the ISC illustrates the misfit of the control mode when dealing with informal learning. The content of the work was grounded in local context and local group member lives, and the posting of local stories as reports on the project website was a successful aspect of the project. However, limiting Internet access and knowledge to one facilitator or officer may have limited representation of relevant voices and did limit group member power. Group members expressed a desire to interact with other groups -- a frustration that could have been overcome by connecting group members via the Internet. Internet access, ability, and common language were real challenges of the ISC project.

Contrast of informal and formal structures

The introduction of informal learning practice to corporate systems also stumbles over the issue of technology control. Social network analysis relates to informal learning (Siemens, 2005; Gotta, 2004) and social software is seen as supporting modes of informal learning. Gotta (2004) makes a case to business models for investigating social computing trends, emphasizing the technology's "horizontal, cross-functional, and networked collaboration and information exchange" (p.4) and identifying blogs as "a good example of how organizations can express themselves from the bottom up"(p. 5) -- in other words, through a more democratic structure. Gotta notes such a structure is not as precise or as regulated as preferred by management, but defends the structure as enabling a more motivated and knowledgeable workforce, noting "Organizations have to decide whether horizontal, cross-functional, and networked collaboration and information exchange helps build a more adaptive organization" (p. 4). He advises that technology be understood in terms of its potential effect on a group. In the case of businesses adopting blogs, Gotta advises

> The most important aspect of governance is to determine the proper level of acceptable use (and enforcement), editorial controls, and audit needs (logging) that balances the risks versus benefits. (p. 6)

The expectation of control is described by a corporate educator (Mosher, 2004) as follows:

> Every organization has close-knit communities of practice within every department. The problem has often been that since this network was not controlled, many companies have ignored or even discouraged its existence. Clearly peer mentoring can be distracting and unproductive if left unchecked, but if fostered correctly, it can be very powerful, especially for the experienced learner. The easiest way to control and encourage these online communities is to sponsor them within the corporation itself. (¶5)

It is ironic that social software, effective because of enabling learner-controlled interaction, is recognized as valuable to corporate systems -- yet the need of the formal system to control social software use limits its effectiveness.

Control of access to ICT

Both formal education and corporate systems tend to control learning through containment of technology in proprietary institutional systems such as learning management systems (LMS). Communication theorist George Siemens (2004) questions this practice as follows:

> The very notion of "managing learning" conflicts with how people are actually learning today. Outside of primary and secondary school, most of our learning falls into the "topping up what we know" category. As a result, we need tools that allow for rapid creation and breakdown. Searching Google, blogs, and wikis has a very quick learning structure creation and breakdown. An LMS has a long creation/breakdown process (and once the learning structure has been broken down (i.e. end of course), it is no longer accessible to learners). LMSs still view learners as canisters to be filled with content -- this is particularly relevant in light of the heavy emphasis on object repositories for learning. Essentially, most LMS platforms are attempting to shape the future of learning to fit into the structure of their systems, even though most learning today is informal and connectionist in nature. (Siemens, 2004, ¶13)

According to Siemens (2004), LMS structure fulfills the control needs of formal systems, but does not enable "informal and connectionist" learning. The open, participatory nature of

informal learning requires open, lateral structures and technology supporting “releasing”, not “controlling” approaches to adult learning (Knowles, Holton, & Swanson, 2005).

Early optimism about the capacity of the Internet to support autonomy and enable greater participation (Tough, 1979; Brock & Heimstra, 1991, cited in Gray, 1999) is fading. Menzies (cited in Rose, 2004), initially optimistic about the possibilities the Internet held for giving a voice to marginalized groups, now notes this use of the Internet has been stifled by corporate use, as follows:

> I was willing to be optimistic in as much as, in the early stages of a new technology coming on stream, it is typically seized by people on the margins. This is one of (Canadian communications theorist) Innis's great insights. It is typically seized by people who have been marginalized, and they will innovate, they will come up with wonderful breakthroughs in terms of new applications, particularly in communication, because with the old configurations they were left out of it. So I was willing to get a little bit excited over the wonderful flowering of democracy through the Internet, but all along I worried that the larger force around networking technology was coming out of the corporate sector and the corporate government sector. So I wasn't surprised that, by 1997, the top use of the Internet was for business purposes. (Menzies, cited in Rose, 2004, ¶22)

Salter (cited in McCaughey & Ayres, 2003) sees growing control and regulation of Internet areas such as AOL and MSN as eventually “rendering the Internet just another colonised mass medium providing standardized information and discussion, limited interactivity, and everything a consumer needs to satisfy manipulated desires” (p. 139). Informal learning entails engagement and participation across connections. Although informal learner groups may move autonomously through connections supported by Internet-based ICT and use technologies available through, for example, the open source community, to what degree do they control their access to the Internet? Atton (2004) observes the contradictory perspectives of the Internet regarding its role in democracy, as follows:

> We might view it as a struggle for a “new” democratic space, fought over by those wishing to regulate practices occurring there (national and international

> legislative bodies and multinational corporations) and by those who consider it as a democratic frontier, a "digital commons" that must be protected against the predations and limits set on it by the state and its agents. Depending on which side you are on in this struggle, the Internet is either economic opportunity or social utopia -- it is rarely conceived as both. (p. 10)

Learning groups

In the literature, informal learning places the individual learner, seeking change, within a network. Social organizational effect has been described by Coleman (1988), and addresses several concepts applicable to a study of participatory learning. As an illustration in his definition of social capital, Coleman (1988) describes a student activists' organization, as follows:

> The "same high school or home town or church" provides social relations on which the "study circles" are later built. The study circles themselves constitute a form of social capital -- a cellular form of organization that appears valuable for facilitating opposition in any political system intolerant of dissent. (p. 101)

The function of social capital, according to Coleman, is as a resource used by actors to achieve their interests. In the case of the student activists, the study circles "constitute a resource that aids in moving from individual protest to organized revolt" (p.101) Coleman (1988) also describes the role of social capital as an information conduit, as follows:

> An important form of social capital is the potential for information that inheres in social relations. Information is important in providing a basis for action. But acquisition of information is costly. At a minimum, it requires attention, which is always in scarce supply. One means by which information can be acquired is by the use of social relations that are maintained for other purposes. (p. 104)

"Appropriable social organization" is the term Coleman uses to illustrate how a social organization of one function can be available for other purposes, such as the case of the student activists using the relationship network of neighbourhood, school, and church as a source for study circle organization. The layering of network upon network increases social capital and can increase a community's well-being. An example is given of a housing

complex group, originally organized to address construction problems, remaining "as available social capital that improved the quality of life for residents" (Coleman, p. 108). When analyzing how ICT is currently being used in informal learning, it may be useful to consider forms of social capital as a resource for action, a support for information transfer, a vessel for trustworthiness, and a mechanism to improve the quality of life.

Regarding the formation of groups, organizational behaviourist Weick (1979) argues that groups do not impose norms on members, but rather that convergence is a necessary condition for the emergence of groups (p. 90). He recognizes "the common assertion that people organize in order to accomplish some agreed-upon end" (p. 239), however, he questions if having the same goal automatically leads to goal-governed behaviour. Sharing a goal of action need not result in action. For example, there are groups of like-minded, goal-sharing members who simply interact among themselves, reinforcing group ideas and excluding disagreement. Weick (1979) observes, "Organizations can feed on themselves for long periods of time" (p. 239). Informal participatory group structures are characterized by many diverse connections and participatory processes that may prevent "organizational inertia" (p. 239).

ICT is recognized as supporting the formation of learning groups. Jarvis (2000) spoke of an emerging learning society that exists outside of public education, as follows:

> There has been a growth in learning networks, rather like those learning webs advocated by Illich. Then he was regarded as radical, but now these ideas are becoming more realistic with the development of the Internet and of all forms of electronic communication (p. 349).

Russell and Ginsburg (1999) examined community organizations which constructed learning delivery systems that effectively combined elements of distance learning and traditional models of instruction and targeted a wide variety of adults with differing skills and abilities

(p. 1). They use the term “online learning community” and offer the following definition suitable to the context of their study:

> An online learning community is one that mediates between the needs of its members and technology to assure access to tools for learning; accommodates the special social, psychological, and political characteristics of adult learning; and shows evidence that teaching and learning are institutionally and culturally embedded in community activities and perceived to be beneficial to both the community and the individual. (p. 5)

Several online communities are described, among them SeniorNet.

Example: SeniorNet

SeniorNet was founded in 1986 with a purpose to “provide older adults education for and access to computer technology” (p. 11), and by 1990 was incorporated as an educational non-profit organization. It is supported by a variety of funders as well as a nominal member fee (USD40 per annum). The organization's aim seems to be to strengthen the non-profit volunteer sector. A current descriptor from SeniorNet.org reads as follows:

> SeniorNet supports older adults' creative and constructive uses of computer and communications technologies for the purposes of reflecting on their life experiences, exploring and entertaining new ideas, restructuring their knowledge, reformulating their values, sharing their perspectives and contributing to the rest of society. (About section, ¶1)

More than 200 local centres provide initial training in technology use and members have access to “a highly-praised technology help center”--members learn and teach others to use computers and communication technology. SeniorNet uses an online forum, in which seniors reflect on their experience and respond to new social issues. Posted responses are compiled into reports that are published online and sent to appropriate policy-makers. In 2004, a national affiliation was made with “By the People” to further engage members in civic issues. Members use discussion groups and chat-lines extensively. Members access online articles tied to current issues, provide each other with links to websites and other online

resources, and post announcements and events on the SeniorNet website. Members report they find the network rewarding "as a source of new friends and support in times of trouble as well as a handy supplier of information on such subjects as how to light a water heater or handle depression"(p. 13).

Participatory learning concepts appear to be integrated in SeniorNet: issues and content are tied to member experience; members can form various relationships via courses, forums, chat and collaborative projects and have access to links and affiliations; and member knowledge is sometimes compiled, published and submitted to policy-makers. SeniorNet members appear to have autonomy. The content and direction also appear member driven and, in cases, participatory -- with members learning from members. Discussion forums are moderated by volunteers, and the compiling, republishing and submission of reports seems to be controlled by a staff member.

Preece (2002) discusses access and usability in online communities and community networks. She sees main challenges being development of technologies that are widely accessible across platforms and devices and that support "sociability," and the use of already existing technology is "a starting point" for extending community development. In the ISC example, group member access to ICT was restricted to a project office. SeniorNet group members may have had existing home Internet access, although the project included community access to ICT and "initial training" through local help centres. Preece singles out asynchronous text environments as powerful for reflective reviewing and composing, and synchronous text messaging for keeping track of each other and synchronizing behaviour – both technologies used successfully by SeniorNet.

Social learning theorist Wenger (2005) originated (with Jean Lave) the term "community of practice." Wenger (2005) provides the following definition: "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly." (CP section, ¶1). He names three crucial characteristics of communities of practice: the domain, the community, and the practice.

> The domain:
>
> A community of practice is not merely a club of friends or a network of connections between people. It has an identity defined by a shared domain of interest. Membership therefore implies a commitment to the domain, and therefore a shared competence that distinguishes members from other people.
>
> The community:
>
> In pursuing their interest in their domain, members engage in joint activities and discussions, help each other, and share information. They build relationships that enable them to learn from each other.
>
> The practice:
>
> A community of practice is not merely a community of interest--people who like certain kinds of movies, for instance. Members of a community of practice are practitioners. They develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems-in short a shared practice. This takes time and sustained interaction. (Wenger, 2005, CP section, ¶2)

The concept of communities of practice is being applied in business, organizational design, government, education, professional associations, development projects, and civic life. Business organizations, especially, have applied the concept as an effective tool to improve knowledge management. "Initial efforts at managing knowledge had focused on information systems with disappointing results. Communities of practice provided a new approach, which focused on people and on the social structures that enable them to learn with and from each other" (Wenger, 2005). Like Gotta, Wenger (2005) notes that the "horizontalization" of communities of practice is a difficult match with the hierarchical structure of government, yet

governments are implementing them in a bid to deal with increasing complexity. Wenger comments on the role of technology in communities of practice:

> New technologies such as the Internet have extended the reach of our interactions beyond the geographical limitations of traditional communities, but the increase in flow of information does not obviate the need for community. In fact, it expands the possibilities for community and calls for new kinds of communities based on shared practice. (Wenger, 2005, CP Applications section, ¶10)

Helpers, stewards, hosts, and moderators

Informal learning groups direct their own learning -- who do they learn from? Learning results from participation (Cross, 2003), therefore members learn from each other. However, researchers also specify certain roles. Tough describes the role of "helper" in informal learning. His research findings (1971, cited in Tough, 1979) showed that 40 interviewees in learning projects obtained "help" from a total of 424 people. "This is a sharp contrast with some classrooms, in which 40 learners received most of their help from only one individual." (p. 97).Tough characterizes ideal "helpers" as offering only the influence the learner seeks and no more: "Any influence exerted by the helper results from the learner's trust in his judgment, or from the helper's contagious enthusiasm, not from the helper's control over future rewards or other consequences of the learner" (p. 74). Further, Tough's findings show that a "helper" was chosen because the learner expected to feel comfortable and relaxed with him, not due to his expertise, experience, or recommendation of others (p. 99).

Wenger, White, Smith, and Rowe (2005) found that although all community members participate and contribute to some degree, a certain person or small group takes on the role of cultivating and tending the community: for communities using technology, they name this role "technology steward." The technology steward role is to find the technology the community needs. According to Wenger et al., this entails the following: understanding the

evolving technology market; selecting technology for the living community; and supporting technology as adopted, rejected and adapted by the community.

Wenger et al. discuss findings that likely relate to an informal participatory group's use of technology. They observe that communities can as easily resist technology as adopt technology, as follows:

> Communities can be quite skillful in resisting new tools, and for good reason. New technologies can shift the power structure, can bring in new and unknown members, and can seem like a distraction from the basic business of the community (p. 14).

They note the widespread and varied experience of members and the availability of affordable or open source tools. Good practice for technology use in communities is offered to "technology stewards" who conduct the following:

- Pay attention to the experience of new members (their learning curve can reveal flaws or opportunities that are invisible to long-standing members);
- Ask community members about their experience and use of technology in other settings (use multi-membership as a stimulus);
- Occasionally give some attention to new tools that are on the horizon, encouraging reflection on how the tensions around separation or membership are experienced;
- Encourage community members to observe each other using the community's basic tools (even watching each other use a common program like MS-Word can stimulate important learning);
- Check on how existing tools are combined and work together.

(Wenger, White, Smith & Rowe, 2005, p. 14)

Nichani (2000) identifies the importance of member ability and uses the example of The Well to show how relationships are strengthened by the personality and skills of the members of an online community.

Example: The Well

The Well was modeled on a French literary salon (p. 3) and its initial members were highly educated, skilled communicators. Conferencing tools, novel at that time, were used from the beginning. Group members in The Well satisfied their learning needs, but also built strong relationships (p. 5). Nichani argues this was due to the personalities of the hosts and their experience in nurturing relationships and solving conflict. “Having able, interested, and encouraging peers made relationships stronger.” (p. 5). Nichani also notes that online social relationships are reinforced by face-to-face meetings, as they provide powerful contextual input important to social interactions. In both observations -- the unique character of the host and the validity of face-to-face context -- Nichani recognizes the importance of human context.

Although various software developments (e.g., visual representations that allow group members to see who is “there” and how group members respond to each other) may enhance the user’s experience, Preece (2002), like Nichani (2000), sees an important role for skilful managers, leaders, and moderators who can “encourage collaboration and promote the co-operation and trust needed for a successful community” (p. 3). Successful online communities have the means and mechanisms that foster social interaction and enable learners to form strong relationships, but that the inclusion of tools such as newsgroups, forums, chat and messaging programs is not enough. The manner in which they are used is also important. Participation is not a given.

Participation

In adult learning literature, the learner is inseparably connected to a “community” through participation, meaningful learning occurs through that participation, and engagement

is dependant on continued motivation, participation and progress toward the learning goal (Tough, 1979; Ettling, 2001; Cross, 2003; Knowles, Holton & Swanson, 2005). Cross (2003) recognized the crucial role of participation as both a motivator and an effective process and identified learning as "an act of participation."

Feminist researchers add to the discussion on motivation and on effective processes in groups working for social change. Ettling (2001) examined the process of women's transformative change and their commitment to action as a pathway for social change, and named processes that allowed storytelling and spaciousness as important factors influencing the depth of participation by women. "Whole, authentic participation is encouraged when spaciousness (or unhurried listening) and different ways of knowing are engaged." (p. 2). Feminist researchers (Ettling, 2001; Naples, 1998) acknowledge children's welfare as being one significant motivator to women's social action -- "activist mothering"-- and also identified a consistent link between women's transformative learning and looking beyond kinship to the larger social issues. "It has long been an axiom in feminist literature that the personal is political and that women consistently look to the needs of the community as well as their own" (Ettling, 2001, p. 4).

Wenger, White, Smith, and Rowe (2005) report on the technologies used by communities of practice and comment on the evolving scope of technology products and the groups' adaptive and inventive usage of them. "The close, voluntary collaboration" of the groups is the fertile context for technology use, but community tensions such as "the continuity of togetherness" and "the relationship between community and individual member" affect how technology is used. Wenger et al. (2005) describe the range of group activities using technology as follows:

> Communities experience these tensions in many activities that are often mediated, supported, or enhanced by technology. These include:
>
> Interacting: To discuss issues, agree or disagree, brainstorm, work on tasks, ask and answer questions, etc., members need to connect, in and across time and space.
>
> Publishing: To produce, share, and collect artifacts that are relevant to their practice, members need to organize communal repositories as well as individual access to them.
>
> Tending: To nurture their togetherness, members need to find ways to participate personally as well as cultivate their community. This requires being able to see the community as community: understanding its pulse, its form of participation, its evolving structure, its emerging roles, and its changing interests and needs(Wenger, White, Smith, & Rowe, 2005, pp. 2-3.).

Access to Internet-based interactive technologies, such as online asynchronous or synchronous discussion, can support interaction and participation, but access alone is not sufficient. Some (Shenk, 1997; Salter, cited in McCaughey & Ayres, 2003; Atton, 2004) question the effect of the Internet on democratic interaction, as is illustrated in the following quote from Salter (cited in McCaughey & Ayres, 2003):

> Whereas on one hand the Web has allowed greater access to a greater number of communication technologies than before, on the other it might be said to have reduced the interactivity of the Internet as official political and business Web sites are developed to act as one-way propaganda platforms….(p. 139)

Dialogue as Participation and Action

Angus (2001) refers to the successful example of the women's movement as effective in "bringing issues to public notice and thereby affecting the agenda that is addressed in public decision-making" (p. 43). Writing on social movements and democracy, Angus identifies the central idea of democracy as being "critical participation." He names two requirements:

> First, widespread access to relevant information and, second, the ability to formulate questions that must be decided, that is to say, the ability to decide what is politically important at a given time. (p. 21)

The first requirement leads to a discussion of control of information and media and relates to control of technology. The second has already been seen in literature on participatory learning: the right to have a voice, to be heard; the role of grounded experience in dialogue; and the wish for extensive and inclusive participation. Angus (2001) emphasizes the role of dialogue, both within social movement groups as "a process of internal discussion and debate in order to share individual experiences and to communicate its perspective to a wider audience of potential activists and sympathizers" (p. 74), and in public discussion and debate. He describes the arena for internal dialogue as "a meeting place" (p. 22) and the arena for public debate as "a public space" (p. 26). Further, Angus notes that dialogue requires communicative skill and respectful relationships, and presents successful dialogue, "a continuous interplay between what is common, or shared, and what divides them" (p. 35), as a tool to tame political conflict in a civilized fashion.

The value of dialogue in civic engagement is also recognized by Menzies (2005). In observing university students, described as "future wise citizens," Menzies notes that the students' memory -- the ability to retain and recall course content to integrate it into discussion -- was diminishing. She suggests this was due to over-reliance on "the external memory" provided by ICT, distraction, and information overload, but also with "not enough of the participative element" (p. 2). Dialogue provides the participative element and grounds knowledge in learners' lives, in a way the "objective" data-based way of knowing does not: over-reliance on the latter in public discussion and decision-making, as Menzies suggests is the case, ignores the human context. Using the term "dwarfing," Menzies describes the suppressive effect of the use of "objective" data-based knowledge as follows:

> First, this is knowledge as represented reality, organized around rules, standards and abstract concepts, that is not only stored and produced outside

> ourselves (think of books with print runs in the hundred of thousands or databases that can be copied indefinitely, in nanoseconds) but is of a scale and scope -- and growing at such a rate in the new economy -- that dwarfs any insights we might "produce" ourselves with our own spoken or written words. More importantly, the dwarfing operates at a deeper level because the knowledge that's derived from outside ourselves, even outside the realm of direct experience and its stories, is also valued more highly because it is considered reliable, whereas personal experience and perception are not. (p. 3)

Menzies contends that it is dialogue's participative element and connection to personal memory that roots objective knowledge to the human context – an important sustaining engagement in informal learning.

In the literature, informal learning takes place in networks and online communities that connect learning to learner community. Autonomous informal learner groups thrive in structures more open and horizontal than formal structures, controlling their participation and engagement. Participation is enhanced by interactive Internet-based ICT. As opportunity to participate is required for informal learning (Cross, 2003), control of technology access is critical. Informal learner groups form to address a common interest or shared goal, and can avoid "organizational inertia" (Weick, 1979) through using open processes that ensure many connections, wide participation, and hence opportunity to "change self or environment" (Tough, 1979). Researchers report various roles within informal learning groups that encourage learning. Dialogue is an important interactive process of participation -- examples discussed incorporate dialogue to various degrees.

Acting: Using ICT for social change

This section includes early experiments using communication technology for democracy, discusses the effect of widespread access to Internet-based ICT, and reviews the use of Internet-based ICT by social justice groups.

Examples: Early experiments using communications technology for democracy

Adult education in Canada has interesting historical examples of radio, film, and television use. No Canadian literature of early telecommunications technology or ICT use for democracy was found. However, Americans Goodman and Kiousis (1998) title a conference paper "Teledemocracy" and survey past case studies of technology applied to democratic models. Attention is paid to interactive features of the technology and the dimensions of feedback and synchronicity, but the authors' stated interest in "the consummate electronic town meeting" (p. 3) and their use of a 1980s definition of interactivity as the extent to which a communication experience can mimic face-to-face interaction (p. 3) undermines their interpretation of the case studies.

The direct democracy model, in which "unencumbered participation is the primary objective" (p. 2), is illustrated by an early electronic town meeting (ETM) initiated by a University of Hawaii political science professor in 1978. His purpose was "to provoke public discussion by giving visibility to issues that are generally ignored in the speeches of politicians and news coverage" (Arterton, 1997, cited in Goodman & Kiousis, 1998, p. 8). The method used common technology (i.e., telephone, and print). An announcement naming the issue, a list of pros and cons, the date of a television broadcast and a description of the participative process were published in the major newspaper. Then, a television program that presented both sides of the issue was aired. Immediately after the broadcast, the professor solicited the public's opinion by telephone. The results were published in the newspaper the next morning. The attempt gave only limited visibility to issues and provoked little discussion. Arterton (cited in Goodman & Kiousis, 1998) points out "that the agenda-setting power lies with the message's originator rather than the public" (p. 9). While it is true that

the well-intentioned professor wanted to give "visibility to issues that are generally ignored," or provide access to relevant information so that individuals could make informed decisions (Angus, 2001), the study did not demonstrate grounding in people's experience. Regarding public participation, the project had only four telephones and could handle only 140 feedback calls. The main failure was due to the control of information by the media: the newspaper refused to publish the results and continued to ignore the issues. Technology in common use today makes this example seem painfully inadequate, yet its lessons regarding democratic participation in setting the agenda and control of technology are still valid.

The deliberative model "strives to bind citizens together in an ongoing discussion about issues affecting the community" (p. 2), and Goodman and Kiousis (1998) insist that technology supporting this model should "simulate face-to-face discussion as closely as possible." However, in the most successful of their examples, a civic initiative from California in 1989-1990: the Public Electronic Network (PEN), "the first government sponsored computer-based on-line network in the United States," the asynchronous technologies (e-mail and asynchronous discussion, online access to public information such as city councilor agendas and staff reports) were used more frequently and to more group member satisfaction than the synchronous technology (synchronous text "forum"). Users could connect to PEN from home or from 25 public terminals. A core group of users successfully lobbied for more services for the homeless. However, PEN owners had problems with harassment, rudeness, and core group domination in the forum as well as difficulty deleting statements due to First Amendment rights. Participation by public officials dropped off and, with less than 5% of the population logging on, the project was shut down. Although municipal government websites are common sources of information today, the

questions arising regarding forum moderation and sustainable and respectful human interaction are only slowly being answered.

Goodman and Kiousis (1998) go on to describe the Legislative Information Network (e-mail listserv) and the Legislative Telecommunication Network (two-way video conferencing) in Alaska, and a cable system video and telephone network in North Carolina. These systems, which used costly technology controlled by government, generated only limited participation. Such systems were replaced when the Internet exploded across public, work, and social life through the 1990s.

The effect of Internet-based technology

Internet-based technology was applied to direct democracy by Ross Perot's electronic town hall ideas in 1992 and in the "superdemocracy" blueprint of Stryker (Shenk, 1997), who designed "the replacement of the judicial and legislative branches of the U.S. government with a never-ending series of plebiscites, in which each citizen would have voting power on every piece of proposed legislation and a part in every verdict in every relevant trial" (p. 133). Shenk (1997) criticizes such plans as unrealistic:

> The notion that citizens of such an enormous country as the U.S. would be able to develop the necessary expertise to make informed decisions on every aspect of governance is terribly unrealistic, as is the confidence that direct votes would completely obviate the need for coordinating and consensus-building. (p. 133)

Electronic polling can provide quick and accurate data, but it can also "turn politicians into unwitting chameleons" (Shenk, 1997) and undermine leadership. The use of electronic voting systems has yet to prove reliable. The application of Internet-based technology to democratic processes is in an early stage of development and its effect is not fully understood. Internet-based ICT is used by informal adult learning groups in various ways and with varying

success. Aspects of Internet-based technology posing problems for informal participatory learning are quantity of information, rapid change of information, the alienation effect and control of access.

Internet-based ICT allows rapid transfer of huge amounts of information being produced and managed electronically. "Up until 50 years ago *information* has always been a good thing," laments David Shenk (1997). "Communicating quickly with people helps to overcome our fear of them and diminishes the likelihood of conflict" (p. 27). However, Shenk notes that with powerful and complex machines, information could be produced faster than humans could process it and the result was overwhelming. Shenk termed the ultra-production of information "data smog – the noxious muck and druck of the information age" (p. 31). The increased flow of information expands the need for new kinds of communities based on shared practice (Wenger, 2005) in which individuals accept processed information from trusted others. According to Siemens (2005), who contends individuals can no longer personally experience all required knowledge, learners need not only <u>many</u> connections to help process and select the information they need, but also need <u>diverse</u> connections to better process the complexity of information. As the effect of the scale and scope of information produced electronically and distributed through Internet began to be realized, sociologist Andras Santos (cited in Shenk, 1997) predicted a coping behaviour (that Siemens now identifies as a required skill for learning).

> Just like the elite have taught themselves to diet in the face of food abundance, in the future... to be involved in data purge culture will be to show that you are a sophisticated user of data, you know where it comes from, you know how to pick up on the little information that matters, and how to get rid of the rest. (p. 212)

Cross (cited in Siemens & Cross, 2005) recognizes the "overwhelming change" wrought by ICT, noting, "When I look at the coming tide of information and the rate of

accelerating change all around us, it's just overwhelming. In order to survive, we have to adapt." His definition of informal learning as "one dimension of how humans adapt for a better fit with their ecosystem" prompted further discussion as the following interview transcript demonstrates:

> *Downes:* Adaptation is the process of conforming to an ecosystem, whereas learning is a process that actually changes an ecosystem.
>
> *Cross*: That's a nice philosophical thought -- but the fact is the ecosystem is changing, too. It's not static. And we're adapting to it. We're in this process of accelerating change and it's dealing with that as much as with what we bring to that that matters.
>
> *Siemens:* We're dealing with complex systems where the initial conditions alter with each change we make. And as these things alter we continually need to adapt and change. So I think learning is playing that meta-role of positioning the ecosystem in a way that most makes sense. (Siemens & Cross, 2005)

The technology that accelerates change and provides vast quantities of information also supports new kinds of learning. Wenger (2005) advocates "communities of practice" as a one solution. Siemens and Cross (2005) suggest informal learning processes support adaptation to change. Further, Siemens (2006) offers 10 propositions, listed below, explaining changes in society and technology that influence how people learn.

1. Increased complexity=increased decentralization
2. Increased information amount=decreased capacity to internalize
3. Accelerated pace of information development=decreased linearity
4. Increased pace, information amount, and complexity=increased ambiguity
5. Increased ambiguity=increased need for diversity
6. Increased diversity=increased need for openness
7. New tools/technology and openness=new affordances and transformations
8. New affordances=democratization
9. Democratization=destabilization of silo power structures and two-way flow (conversation, knowledge, and information)

10. Two-way flow=equality among participants of a space
(Siemens, 2006, section March 31).

Another problematic aspect of Internet-based technology use is an alienation effect described by Gray (1999) as "technophobia" -- the powerlessness and alienation learners perceive if they feel they are being controlled by the technology, not using it for their own means. Menzies (cited in Rose, 2004) refers to Canadian communications theorist Harold Innis ' prediction that "advances in communication allow for greater realism, but also greater delusion." (¶10) Menzies elaborates how using digital technology as a communications medium can remove one from grounded reality, noting:

> I also look at how people are being drawn out of a context of life into a symbol sphere where the medium in which they are immersed and perceive reality is one of highly abstracted symbols rendered as little flashes of light that move and morph at the speed of light. A lot of the book looks at the implications of both being drawn into this unbearable lightness of being digital and being drawn away from, becoming more disassociated from, grounded realities, face-to-face dialogue. And as we are drawn away, we lose the capacity to get back to it: it's almost like closure sets in. (Menzies, cited in Rose, 2004, ¶10)

Menzies (cited in Rose, 2004) contends alienation comes from lack of opportunity to interact – she refers to Ursula Franklin's term "headless tyranny", lamenting: "This faceless, headless technology, there's no opportunity for negotiation, for dialogue, for empathy: nothing" (¶9). Although Franklin was referring to technology such as online banking and digital gate-keeping systems, the user perception of online technology as "headless tyranny" is a barrier to meaningful online interaction. Menzies also notes how the increasing use of the Internet for work, school, banking, and shopping is replacing opportunity for social interaction and increasing alienation. Ettling (2001) advised the use of storytelling as an important method of grounding processes--Menzies also recommends strategies sharing personal stories to counter the erosion of important social bonds, noting "The key is that we see ourselves as part of the picture and that we see our story as contributing to the larger story" (Menzies, cited in Rose,

2004). The literature suggests that, to address the alienation effect of technology, informal learning groups need to ground learning in the meaningful experience of the learners and in relevant human interaction such as sharing personal stories and successful dialogue. Grounding learning and actions in learner experience was seen to be an important element of the historical participatory learning examples and is a main concept of the study -- for contemporary informal learning groups, it may be especially important in order to avoid the alienation effect of technology.

Siemens (2005) has developed a theory useful in understanding the impact of technology on learning and the way people do things together. “Connectivism is the integration of principles explored by chaos, network, and complexity and self-organization theories.” Connectivism is an environment, like informal learning, in which learners are autonomous and learning is exploratory. The learner is a starting point and knowledge resides in the learner's context, but also in others’ contexts and in “non-human appliances.” Siemens (2005) lists several principles of connectivism, as shown below.

- Learning and knowledge rests in diversity of opinions.
- Learning is a process of connecting specialized nodes or information sources.
- Learning may reside in non-human appliances.
- Capacity to know more is more critical than what is currently known
- Nurturing and maintaining connections is needed to facilitate continual learning.
- Ability to see connections between fields, ideas, and concepts is a core skill.
- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
- Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong

> tomorrow due to alterations in the information climate affecting the decision. (Siemens, 2005, ¶22)

Siemens emphasizes that personal experience of all required knowledge is no longer possible -- knowledge is distributed and learning requires forming connection with nodes: other people, networks, organizations or information sources: "The network IS the learning" (Siemens, 2005). Knowledge transference, especially of tacit knowledge (Stephenson, 2002), is affected by trust, a quality of the connection. Connections are diverse -- the results from Netville show that many weak connections support learning as well as strong connections (Hampton, 2003). Siemens discusses the chaotic structure of connectivism as opposed to the linear structure of much formal learning:

> I perceive learning as a network formation process. We are not always actively constructing our learning, but we are always creating and loosening connections (even when we are constructing learning, it only becomes truly meaningful when we connect it to existing elements). Part of the experience is to evaluate and recognize patterns. In many courses, content is structured to provide progressive linear explore to new concepts and ideas. While academically effective, few aspects of life work in such a coherent fashion. Even when we design learning in a linear model, learners seek information that they find relevant . . . (Siemens, 2006, April section, ¶3)

Siemens (2005) describes his own personal network as "a bit of a chaotic space that rests partly in my head, partly in my blog, partly in a few of the weblogs that I contribute to, but this structure is augmented by physical human beings that I talk to on a daily basis." He uses as guidance "trusted nodes" Siemens (2005): "Within social networks, hubs are well-connected people who are able to foster and maintain knowledge flow."

Wellman (2001) noted how a community using Internet ICT developed a range of diverse connections across networks notes how work, community, or domestic interaction "spills over organizational boundaries" (p.2031) into social networks. He contends that although the Internet was originally intended to support collaborative work, "it is an excellent

medium for supporting far-flung, intermittent, networked communities" and notes the following:

> Email transcends physical propinquity and mutual availability; email lists enable broadcasts to multiple community members; attachments and Web sites allow documents, pictures, and videos to be passed along; buddy lists and other awareness tools show who might be available for communication at any one time; and instant messaging means that simultaneous communication can happen online as well as face-to-face and by telephone.
>
> The Internet is not destroying face-to-face community, but is supporting, extending and increasing the density of existing networked communities (Wellman, 2001, p. 2032).

Example: Netville

Hampton and Wellman (1999) studied a wired suburban development in Toronto. Netville (an adopted name) was a development of 120 detached single-family homes built with broadband access and advanced communication technologies, including a local network. House prices were average and residents were largely middle class, English-speaking and married. Netville families were offered the technology in exchange for agreement to be studied. Approximately 65% agreed to participate. Hampton and Wellman (1999) studied this group in order to research participation in online and offline community. They found that

> The Internet supports a variety of social ties, strong and weak, instrumental, emotional, social and affiliative. Relationships are rarely maintained through computer-mediated communications alone, but are sustained through a combination of online and offline interactions. Despite the ability of the Internet to serve as a global communication technology, much of the online activity is between people who live (or work) near each other, often in Netville itself. In Netville, the local network brought neighbours together to socialize, helped them arrange in-person gatherings… facilitated the provision of aid, and enabled the easy exchange of information. The high rate of online activity led to increased local awareness, high rates of in-person activity, and to rapid political mobilization to fight the developer … (p. 12)

Technology was used by the group members for dialogue and socialization. Wired participants knew three times as many neighbours and visited face-to-face 1.6 times more often than non-participants (Wellman, 2001, p. 2031): when confronted with a common

problem, they were able to quickly disburse information, decide on a course of action, and organize to act. Regarding this kind of network, Angus (2001) contrasts the way ideas are developed and distributed in social movements to communications systems in formal institutions and mass media:

> The public spheres internal to social movements often develop ideas that later have a wide impact. …This process of formation and distribution of ideas internal to a social movement is very different from the influence of established institutions of communication such as mass media or schools or universities… An idea developed within the more restricted, internal public of a social movement can come to have a regenerating influence on a much wider public…. The circulation of an influential statement within a social movement -- like Naess on deep ecology -- can have a much larger impact than a long academic treatise or even a popular TV show because of its connection with the place in social movements where democratic discussion occurs. (pp. 75-76)

Angus connects the scope of distribution of ideas to the degree of connection to the meaningful connections of informal networks. Informal learning groups using Internet-based ICT as well as non-electronic tools and face-to-face interaction to collaboratively develop and distribute meaningful ideas can potentially have influence.

Informal groups using ICT for social change

Groups working for social change engage in informal participatory learning. Their learning results in various actions. The actual structure and governance of the Internet is a concern of groups using it as a democratic, civic or political vehicle. Activist groups of the literature share processes that have been identified in informal participatory groups and see the Internet as supporting those processes. Salter (cited in McCaughey & Ayres, 2003) describes why the Internet is a good tool for social-movement groups -- it helps them communicate and organize, to generate and distribute information cheaply and easily, and also allows response and feedback.

> This is in large part because of its structure as a de-centered, textual communications system, the content of which has traditionally been provided by users. Again, such characteristics accord with the requisite features of new social movements: non-hierarchical, open protocols, open communication, and self-generating information and identities. Further, the openness of Internet standards procedures to the admission of interests, as well as the open nature of discussion, means that Internet technology is indeed open to such groups in the pursuit of such ends. (p. 129)

Salter equates access to Internet communication with the right to be heard, saying "those who aren't heard are largely ignored" (p. 131) and feels it is essential that exclusions to Internet access be ended. Control of the Internet is a widely-discussed issue. Like Salter, Menzies (2004) sees the increasing privatization of the Internet as stifling its use as a vehicle for democracy.

> Now we've got just a few companies who are the gateways to the Internet and we're seeing some very disquieting trends around their policing activity. Certainly, the move is towards pay-per-service transactions and that, of course, mitigates against the kind of democratic commons, the sharing culture, that people were very bravely and successfully promoting during the 1980s and the better part of the '90s. Out of that culture came the kind of networking that made the anti-World Trade Organization demonstrations in Seattle become a world event. You also had the highly successful global organizing around the Beijing women's conference. The women managed to pull off a very successful conference, even though the Beijing government did everything in its power to thwart them, and the networking has continued as the women pursue all the items on their agenda for action. Then there are initiatives like the Women's Health Network; like PovNet, which started in British Columbia and is now going national (Menzies, cited in Rose, 2004, ¶22).

The loose, lateral networks enabled by the Internet characterize new modes of activism in which "the boundaries between politics, cultural values, identity processes and collective self-reliance become fluid; politics becomes not only an instrumental activity for achieving concrete goals, but even at times an expressive and performance activity, entwined with the development of the self" (Van de Donk et al., 2004. p. xiii). De Wilde (cited in Van de Donk et al, 2004) conceptualizes new social movements as valuing diversity, decentralization,

informality, and grassroots democracy over centralization, formality, and hierarchical structure. He matches Internet affordances to new social movement needs.

Galusky (cited in McCaughey & Ayres, 2003) questions the ability of websites "to empower citizens." He criticizes the one-way design of an activist website and its assumption that its membership is configured as

> . . . generic individual(s) in need of expert-mediated information. This position of the empowered citizen is both limited and limiting. It privileges and even valorizes modes of dependence, making the individual beholden to systems of expertise. It also diminishes the value of the particularity of specific persons with novel and valuable experiences -- local experience (p. 185).

Galusky describes the value of participation and the strength of using member-generated content, both elements of participatory learning. Another researcher recalls the physical presence and physical action associated with activism and remarks, "After all, forwarding an online petition to your email recipient list is far from sitting in at the Woolworth's counter or chaining yourself to a tree. Can you really put your body on the line online?"(McCaughey, 2003, p. 5). Social justice advocacy is inseparable from the "physical action" or the lived experience of the advocates that motivated their engagement and continued participation, therefore it can be expected that online technology use is grounded in, and inseparable from, face-to-face activity. Menzies (2004) recognizes the relationship of online to offline processes in the following quote:

> I think that what is happening now is people are paying more attention to the importance of linkages between online networking and grounded, face-to-face actions. Because the sustaining power of the anti-globalization movement is very much, in my opinion, the face-to-face encounters as people get together at Seattle and Quebec City. I went to Quebec City myself and my experience over the course of four days reaffirmed the importance of face-to-face dialogue in building a sense of personal power and then actually making things happen. (Menzies, cited in Rose, 2004, ¶24)

Menzies reported experience illustrates how grounding learning in lived experiences, in this case face-to-face dialogue, brings meaningfulness to the learner -- a powerful factor in the group's strength and ability to act.

Dialogue, so important to activism, consists of communicative transactions. Can the Internet support this goal? Salter (cited in McCaughey & Ayres, 2003) questions the ability of the Internet to support Habermas' criticizable validity claims and gives three reasons:

> Whenever we act communicatively, we raise claims that the other party(ies) in communication can question. In order for a speech act to be accepted, the hearer must be able to accept its truth, the corresponding normative basis, and the sincerity of the speaker. Of course, such criteria might be unattainable on the Internet. First, verification of information on the Internet, as with any medium, is a complex process requiring the will and time that many are not prepared to invest. Second, the lack of a shared lifeworld, or even a shared cultural background of international Internet users, causes problems for the acceptance of normative acceptability or rightness. Finally, the much-championed anonymity of the Internet makes the assessment of sincerity very difficult indeed. (p. 136)

However, it is not interactive technology that supports dialogue that is singled out as the most successful use of ICT by activists (Wright, cited in Van de Donk et al., 2004). It is one-way technology that allows the collection and distribution of information. Angus (2001) identifies access to relevant information as a democratic right. Wright (cited in Van de Donk, 2004) warns of problems of the "growing data smog" (Shenk, 1997) as the amount of information increases -- the problems of excess volume and of chaotic disorganization of information can render information useless. Rucht (cited in Van de Donk, 2004) qualifies the Internet as being an efficient tool "to gather and spread information for those who not only have the technical facilities but also know what they are looking for" (p. 30). Accurate information is obtained and circulated widely through mail lists and websites, and discussion or interpretation of information also occurs online. The ability of new social movements to develop and widely circulate information has challenged mainstream media and weakened

their gate-keeping capacity (Bennet, cited in Van de Donk, 2004, p. 141). Rucht (in Van de Donk, 2004) discusses the reaction of informal groups to mainstream media control.

> As mass media are extremely selective in both what they cover and which aspects they focus on, protest groups . . . often feel ignored or grossly distorted. . . .Simplified, one can identify four reactions to such frustrating experiences, which can be symbolized by a quadruple "A": abstention, attack, adaptation, and alternatives.
>
> - Abstention -- withdrawal from attempts to influence the mass media and the retreat to inward-directed group communication.
> - Attack -- an explicit critique of, and sometimes even violent action against, the mass media -- complain to editor, start a collection of signatures against, contact rival media.
> - Adaptation -- the acceptance of mass medias rules and criteria to influence coverage positively -- may include hiring a professional journalist
> - Alternatives -- attempt to create their own independent media/communication in order to compensate for lack of interest or bias by established media..(pp. 36-37)

Atton (2004) characterizes cooperatively-run alternative media as non-hierarchical communities that can inspire loyalty on a transnational scale. He describes the technology used by Independent Media Centre operating during the WTO in Seattle, 1999 as follows:

> The centre had both a physical and virtual presence. Its virtual presence on the Web enabled its small core staff to distribute streaming audio and video footage of the demonstrations as well as written reports, across the world. Technically this was achieved through the use of open publishing software, where an independent journalist or activist could upload their reports using a pro forma on the IMC website. No prior approval was needed from the core group, neither was the group responsible for editing the content of reports in any way…. Such independent accounts provide a powerful counter to the enduring frames of social movement coverage in the mainstream media (p. 31)

The Indy media did have an editorial group that would remove duplicate, false, or content such as hate speech from the main pages to a separate page labeled "Hidden stories" (Atton, 2004, p. 31), thereby exercising some control, but not removing the voice.

In alternative media, reporting is done by community members.

> "Native reporting" can usefully define the activities of alternative journalists working within communities of interest to present news that is relevant to those communities' interests, presented in a manner that is meaningful to them and with their collaboration and support. (p. 35)

Professional journalists who maintained blogs during the Iraq war suggest that the popularity of the blogs, in contrast to the mainstream coverage, was due to their direct, personal voice and transparency that led to trust between reader and writer. "It is this relationship, developed from subjective modes of address, coupled with the disillusionment and skepticism toward the mass media, that makes the weblog a valuable site for re-imaging news practices (Atton, 2004, p. 56).

Civil disobedience also occurs online, for example, mass emailing campaigns that overload web servers, virtual sit-ins, and filter disablers. Atton suggests that groups using such Internet-based methods of protest are not replicating street protest, but work "to redress the imbalances of opportunity, access and provision that have come about directly as a result of government regulation or corporate restriction of the Internet" (Atton, 2004, p. 23).

Summary

This chapter discussed participatory informal learning, starting with the persistent study circle model and ending with social justice groups using Internet-based ICT for social change. Earlier experiments tended to force technology into reproducing face-to-face method, and the use of ICT for democratic participation is still not fully understood. Although current informal learner groups use social and interactive technologies as well as one-way communication technology in order to support many diverse connections, participation and collaboration, their open processes and autonomy depend on access to the Internet, and thus they would be at the mercy of any controllers of the Internet.

Nevertheless, ICT allows informal groups to do more, more efficiently. The main uses of technology in informal learning appear to be for communicating, for accessing information, for working collaboratively, for publishing and archiving, and for distributing information. Informal learning groups integrate learning and knowledge in the community (Cross, 2003). Atton (2004) elaborates, as follows:

> The building of an online civic centre that is to be more than a mere directory of worthy websites is to advocate a communal approach to the production, development and distribution of ideas that deal directly with the everyday. In other words, an emphasis on the everyday suggests a digital commons that not only addresses people's everyday concerns but is also constructed through them. (p. 8)

Group members' personal experiences and stories are "heard," primarily in text form, as authentic voices of individuals or via native reporters.

Informal learners form communities – networks of connections sustained through trust and open, inclusive democratic structures. Processes are participatory and the literature identifies a role of "helper" or "technology steward" (Wenger, 2005) to help sustain the group. Wellman (2001) contrasts hierarchical, bounded groups with social networks, noting that for social networks, "Boundaries are more permeable, interactions are with diverse others, linkages switch between multiple networks, and hierarchies are flatter and more recursive." (p. 2031). The distinction is important; Salter (2004) characterizes social justice groups as non-hierarchical networks using open protocols, open communication and self-generating information and identifies how ICT and "the de-centered, textual, communications system" (p. 29) of the Internet accords with such networks. Examples in the literature show ICT supporting loose, lateral networks and processes that are open, adaptive and flexible, and show formal systems needing to build in controls to conform ICT to hierarchical processes. Siemens (2006) suggests democratization of learning will result from

the destabilization of silo power structures, allowing a two-way flow of conversation, knowledge and information and "equality among participants of a space" (Siemens, 2006, section March 31). In a chaotic, complex environment (Siemens, 2006), loose, responsive networks with open and fluid structure appear to operate more effectively than controlled systems, hence an understanding of informal learning groups and their use of technology use becomes more important.

CHAPTER 3

METHODOLOGY

Introduction

This chapter describes the methodology used in the study. It describes the research design, the selection of study participants, the collection of data, the analysis of the data, the quality of the data, and the ethical considerations of the study.

Research design

The study used a qualitative approach and grounded theory research design. As qualitative research attempts to understand the world through the eyes of that world's participants, it occurs in a natural setting -- in this case, in the community among informal groups participating in advocacy. Qualitative research begins, not with a hypothesis to be proved or disproved, but with a flexible plan to explore a phenomenon (Wilson, 1998). Grounded theory methodology was considered and selected as an appropriate method for discovery. There is little research available on informal learners' use of technology -- the research problem matches Stern's criteria, as noted in the following: "I think the strongest case for the use of grounded theory is in investigation of relatively uncharted waters" (Stern, cited in Glaser 1994, p. 116). In grounded theory methodology, theoretical preconceptions are avoided and the researcher relies on observation and data acquired through fieldwork interviews, observations and documents. Data collection and data analysis procedures spiral in tandem according to the demands of emerging theory (Charmaz, cited in Glaser 1994): as data are collected analysis occurs, identifying and connecting categories, and further developing emerging concepts through constant checking and comparison with additional

data (Creswell, 1998). The process is reiterative. Data collection ends when significant conceptual variations are no longer produced, and the analyses are integrated around an identified core (Dey, 1999). Thus theorizing is the final, not first, step in a study. Charmaz (cited in Glaser 1994) points out that grounded theorists study process, and that a grounded theory study is but a step in a process that will be continued by further study, explaining, "Grounded theorists aim to develop fresh theoretical interpretations of the data rather than explicitly aim for any final or complete interpretation of it." (p. 97).

McCaslin and Scott (2003) suggest an inductive process that promotes an holistic awareness of the human ecology under study, so that the theory created is grounded in accurate, relevant data which is a real product of the human ecology under study. The researcher, also a member of one group under study, found this process useful. By stepping back and considering a range of advocacy groups as a holistic ecology, it became evident that the similarities and differences among the groups' functions, relationships and processes circumscribed an adequate framework for the exploratory study. Sites providing data for grounded theory procedures were selected for comparison, not representation, and for conceptual variation across sites (Dey, 1999). A rich description of the people, settings, and conditions as they existed in the ecology was developed. From the rich description and a more developed theoretical sensitivity, the focus of the study became to be defined as the advocacy groups, the nature of their informal learning, and the functions of ICT within that learning. Through this process, the following aspects were identified for investigation:

- Group context: Why and when did the group start? What are the group goals? What are the successes and challenges of the group?

- Relationship networks: How many people are involved? What kind of structure is used? How do group members do things together? With other groups?
- ICT access: What technology is used? How did group members find out about it? How did group members acquire it? What ICT has helped most in group successes?
- ICT skill development: In the group, who uses the technology? How did group members learn to use it? Have group members changed the way ICT is used?
- Functions served by technology: How did advocates use technology to do what they do? What function did ICT play in group internal and external processes? How was feedback obtained? How did group members know their processes are working?

Once a comfortable understanding of the phenomenon of interest was defined, data collection protocols were created to capture data relevant to the ecology under study: "Data collected with poor connection to reality will yield theories of little or no relevance to that ecology." (McCaslin & Scott, 2003, p. 5). Procedures included face-to-face interviews with advocacy group members, observation of group members, document review, field notes, and a researcher journal. Data analysis followed the grounded theory procedures of open coding (identifying categories, properties, and dimensions), reflective coding (connecting categories, examining conditions, strategies and consequences), and selective coding (conceptualizing theory).

The research design of the study, an exploratory study using grounded theory methodology, is appropriate for discovering how the use of information and communication technologies affects advocacy groups' ability to act. The strengths of this design are the authenticity of data, the ability to triangulate data, and the deep, reiterative analysis of the data that allows for inductive theory generation. Its weaknesses lie in the breadth of work

related to initial data collection, and the dependency on the researcher as the sole interpreter. The steps taken to address design weaknesses are described at the end of this chapter. The next sections describe the study participants and the data collection and analysis.

Data collection occurred primarily between July and November of 2005 -- a longer timeline than originally intended. The study schedule was altered due to the build-up to a critical interlude in the province' public education system -- a two-week job action by public school teachers in October of 2005. Further data collection continued to March, 2006.

Participants

The study's unit of analysis is advocacy groups, viewed as informal learning groups (see Chapter 1, Definition of Terms and Assumptions of the Study). Advocacy groups are defined through the participation and experience of individual group members. A purposive sample of adults involved in advocacy groups was used in this study. Fifteen advocates, including the researcher, participated in the study. All participants were members of the researcher's public education advocacy network centred in Vancouver, British Columbia – an informal network existing through various connections and consisting of groups of fluctuating membership. The fifteen advocates contributing to the study participated variously in this informal network.

Initially, six adults from three advocacy groups were interviewed. The three groups were an established school seismic safety advocacy group, a group advocating for inner city schools, and an established public education advocacy group. Inclusion criteria for advocacy groups were as follows:

- The group was informal: it existed outside of formal systems with no formal support for provision of technology or training; it used participatory methods; its structure was non-hierarchical and inclusive;
- The group formed out of a perceived need for change and identified specific actions as goals;
- Functions of the group centred on information and communication.

All participants had children in the K-12 (kindergarten to Grade 12) public education system and all were actively involved in some aspect of their school, their school district, or the provincial education system. Participants had various relationships among themselves, ranging from being co-activists to name recognition only. Participants were not in competition with each other, but were vocally supportive of each other's efforts, assuming a commonality of purpose. The researcher was familiar to and accepted by participants -- there was a level of trust that facilitated open provision of data.

Initial interviewees were recruited by a telephone or email request for volunteer participation via the researcher's network. Of the 10 persons who volunteered, six participants were selected by the researcher. Ethics Approval from Athabasca University was granted in June 2005 (Appendix A). The six selected participants received the Letter of Consent: Interviews (Appendix B) as an email attachment. The Letter of Consent: Interviews clearly states the following: that participation is voluntary; the amount of time required; the participant's access to data provided; how the data will be stored and destroyed; and that pseudonyms would replace any personal information. Upon receipt of the completed Letter of Consent: Interviews form, a face-to-face interview was scheduled, conducted and recorded according to the Interview Protocol (Appendix D).

As well as interview data, the researcher received permission to closely observe the public education advocacy group, and to study group documents. Group members completed the Letter of Consent: Observation (Appendix C), agreeing to be observed; permitting group archival documents such as minutes, memos and communication transcripts to be used as data; and permitting observational notes to be made about their group activities. The form included clear explanations of study procedures and confidentiality, similar to the Letter of Consent: Interviews. This group consisted of five members, including the researcher, and two of whom were also interviewee participants. Due to the unexpected extension of the schedule, a coda with the extended dates was added to the Letter of Consent: Observation form and initialed by the participants.

As the initial six interview transcript data were being analyzed, it became apparent that more data were needed to elaborate further on emerging categories in certain technology use areas as well as about informal technology users accessed and learned to use technology. Also, advocacy actions arising during the October teacher job action instigated a second interview with a participant. To obtain this further data, the following participants were recruited.

- In September of 2005, a provider of technology to non-profit community groups was selected as a seventh interview participant. The technology provider was not a member of an advocacy group and did not have a relationship with the K-12 public education system. The interview process followed the same method as outlined above. The same interview protocol template was used, but questions were asked from the point of view of a technology provider.

- In October 2005, an eighth interviewee was recruited to provide additional data on "email listservs."
- In October 2005, a ninth interviewee was recruited from a fourth advocacy group with a provincial focus in order to provide more data regarding province-wide networks.

In November 2005, a second interview was conducted with one of the original participants regarding action.

Between February and March of 2006, four additional advocates of the wider advocacy network were added to the study in the form of discussion forum postings that had particular application to the study.

Therefore, in total, there were 16 participants (15 advocates including the researcher and one technology provider) providing data for the study.

In grounded theory, this additional sampling is accepted as theoretical sampling. "Theoretical sampling refines, elaborates, and exhausts conceptual categories" (Charmaz, cited in Glaser, 1994, p. 112). Data collection occurred within the ecology, often in participant kitchens surrounded by the schoolchildren whose learning experiences, in many cases, had motivated their parents' activism. Typically, interviews were interrupted by parenting, work or social responsibilities--by phone calls or someone at the door. Evidence of busy lives surrounded the interview sites -- stacks of paper, jotted notes stuck on top of school notices on the fridge, something cooking on the stove and half-full coffee cups in dangerous proximity to computers (Figure 1).

Figure 1. Typical participant site

Observations were made of meetings at educational forums, in government offices, in school auditoriums, at school board offices; there were meetings with media in the street, and hurried meetings at cafes and pubs or advocate homes. Participant engagement in advocacy was firmly embedded in their daily lives and in their community. That informal learning occurred through the advocacy groups was evident--the level of knowledge and the degree of its application was generally high among participants. The researcher's own research procedures were a subject of interest, and were shared in general discussion of the processes of the study and the uses of research.

Data Collection and Analysis Procedures

Qualitative methods were used for data collection: interviews, observations, documents, and reflective journal. Data were collected from a variety of sources. In grounded theory method, data analysis begins as data are collected -- data are categorized, assessed, re-categorized and reassessed and new data are sought according to the needs of emerging

concepts (Dey, 1999). Data collection and data analysis in the study occurred concurrently (Charmaz, cited in Glaser, 1994). This section will discuss the data collection procedures and the data analysis procedures; however, the reader should bear in mind that the procedures were not necessarily sequential, although the processes of the growing complexity of codes and the narrowing focus of analysis could be understood as linear.

Data Collection.

Face-to-face interviews

Data collection began with face-to-face interviews with six participants from three different advocacy groups. The Interview Protocol was followed. Interviews averaged an hour in length, were recorded, and transcripts were made. The six interview transcripts comprised the initial primary documents. Additional data from the face-to-face interview events consisted of digital images of the interview sites and observational notes. During the data collection period, a real-life event occurred (BC teachers' job action) which generated activity in the groups under study that applied to emerging concepts in the data analysis. Four further interviews were conducted, one with a technology provider, two with new participants and one a second interview with a participant. A total of 10 face-to-face interviews were conducted.

Using interviews as a data collection strategy has advantages and disadvantages. The face-to-face interviews used in the study addressed the research questions using the standardized open-ended interview as described by Tashakkori (2003). Face-to-face interviews allow probing and can provide more in-depth information. Although a fairly unstructured method of collecting data, the standardized open-ended interview gathers qualitative data, but neither the wording nor the sequence of the questions on the interview

protocol is varied, so the presentation is constant across the participants. This structured protocol is especially applicable to the initial six interviews, before the researcher's interview focus was affected by the analysis, and makes it more likely that variations in data were a result of participant experience or point of view, not of inconsistent protocol. Some of the disadvantages of data collection using interviews -- aside from the obvious one of researcher bias (addressed under Researcher Role)--are that the data are considered to be "indirect," i.e., filtered through participant point of view, that interviews may not provide information in a natural setting, and that participants are not equally perceptive or articulate (Cresswell, 2003). It is interesting to consider "direct" data and "natural setting" when the study's phenomenon of interest occurs largely outside of physical bounds. In exploring how adult informal learners use ICT, the researcher quickly realized that the participants operated in a pragmatic way, using wherever and whenever "worked" -- in a manner not observable by the researcher. "Natural setting" was glimpsed in retrospect, and "directness" was evidenced by archival remains and resulting actions. Another advantage of using interviews was the difficulty of observing participants directly. Face-to-face interviews were chosen instead of email interviews because participants were in the researcher's local area and because the researcher anticipated a range of articulation in discussing technology, especially. (This turned out to be true and the Technology Chart Visual included in the Interview Protocol was invaluable.) The researcher took to carrying a digital camera and capturing random images of natural settings that happened to occur during the interview. The images were entered as primary documents for data analysis.

Observation

During the data collection period, the researcher also gathered observational data in the role of participant-as-observer, spending time "inside" one public education advocacy group and informing the members that they are being observed (Tashakkori, 2003, p. 313). The disadvantages of this data collection method -- researcher intrusiveness, lack of rapport between researcher and participant, and possibility of gathering unusable "private" information -- were largely ameliorated by the fact that the researcher was a long-time member of the advocacy group. This history addressed reactivity. All members of the group demonstrated their trust in the researcher by completing the Letter of Consent: Observation form (Appendix C) permitting access to observation and group documents for data collection. Observational notes, sometimes accompanied by digital images, were recorded and entered as primary documents.

Email archive and other group documents

The email archive of one advocacy group was collected to provide in-depth data about the use of this technology, as well as data on group functions. The criteria for email message use were that the email messages

- followed the group internal communication strategy of using whole group email, i.e. all messages were addressed to all group members;
- originated with one of the five directors;
- were sent between August 1 and October 31, 2005.

The researcher accessed messages from her email archive and transferred them into the data analysis program as primary documents.

This group's documents were also used for data collection: they included the minutes of three meetings and the one newsletter published during the data collection period, as well as documents published and distributed during the collection period.

Data from a listserv used by the wider advocacy network were also used. Postings were copied from the listerv with permission and added to the body of data.

The advantage of collecting data from documents was that they were common devices of the groups and they were already in textual form. They also differed from the email messages in level of expression -- they were written with reflection for a more permanent purpose. The disadvantages raised by Cresswell (2003), that documents may be difficult to find or may not be not authentic or accurate, do not seem to apply here as documents either originated within the group, notably in electronic form through a website or as an attachment to email, from public institutions such as schools and government, and from mainstream media.

Reflective journal

The researcher used a reflective journal throughout the data collection and analysis, noting observations about the interaction between participants, reactions to the data collected, difficulties in procedures and changes in thinking. Data about the "human instrument," notations using the device of "bracketing" -- separating researcher knowledge of the study from the experience generating data--and information on methodological decisions were also recorded here. All journal notes were entered as primary data.

Data Analysis

Data were analyzed with the help of the qualitative analysis software program AtlasTi Version 4.2. AtlasTi facilitates theory development by allowing the researcher to assign text,

visual, or audio data as primary documents; to code data at many levels; to write memos on data, quotes or codes; to organize codes into families; and to manipulate coding, memos and families in network views. All data described previously were eventually added into this program, coded, and analyzed. This was a reiterative process that led to the selection and identification of sufficiently developed abstract concepts.

The first data coded were the initial six interviews. During the interviewing and transcribing of interview data, the researcher worked diligently to listen to the meaning in the advocates' words and to bar subjective preconceptions and assumptions. McCaslin and Scott (2003) describe open coding as "an analytical procedure that performs two basic tasks: it makes comparisons and asks questions." During open (McCaslin & Scott, 2003) or initial (Charmaz, cited in Glaser, 1994) coding, the researcher looked at the data and asked: "What do I see going on here?" (Charmaz, cited in Glaser, 1994). The researcher winnowed both descriptive and analytical codes out of the data -- looking at discrete events, statements and observations and also trying to understand codes implicit in participant assumptions and processes. In a study focused largely on functionality, descriptive codes such as the general "email use" were obvious, while analytical codes such as "trust relationship" were less so. The researcher cycled through the coding of the interview data, the first six and subsequent four additional interviews many times--as recommended by Charmaz (cited in Glaser, 1994): looking at general context, participants, and events in the data; noticing what participants seem to ignore or lack; looking at participant expression or in vivo codes; and seeking, through similarities and differences, processes indicated by the data -- returning repeatedly for more detail or seeking additional data. Then, text of the email archives and other documents were folded into the coding. Finally, the discussion postings were added to the

study documents. Many memos were attached to codes to elaborate on their dimensions and ask questions. Charmaz (cited in Glaser, 1994) notes that memo-writing by the researcher "helps to expand their theoretical grasp of the materials, and keeps their analysis flexible, and provides sharper clearer guidelines for data collection" (p. 107). An example of a study code list is found in Appendix E: AtlasTi Outputs.

The list of codes, memos, and quotations grew. Codes with a high number of incidences were refined according to sub-dimensions. Eventually the creation of new codes slowed and the researcher began to organize the codes into families.

Reflecting

Reflective coding, also called axial coding (Cresswell, 2003) or focused coding (Charmaz, cited in Glaser, 1994), is the process of beginning to understand the relationships and relate the codes to each other schematically, making coding families (Glaser, 1994). Codes in a family have a common property or dimension such as a causal condition, a process, a type, or an identity -- dimensions that are not necessarily preconceived. Initially, the research questions shaped the organization of coding families, but the need to add and refine coding families became obvious. The process, which had begun with the elaborative coding memos, continued with the organization and reorganization of the codes into category families. Again, the process was reiterative:

> The purpose of focused coding is to build and clarify a category by examining all the data it covers and variations from it. Frequently, this means going back through the data and resifting in relation to the newly devised category. New categories may subsume earlier materials that were left un-coded or were coded in different ways. (Charmaz, cited in Glaser, 1994, p. 103)

To help with reflective coding, the researcher used two tools to "aid in reconnecting the data that surfaced from the open coding procedures" (McCaslin & Scott, 2003, p. 11): a

conditional relationship guide and a reflective coding matrix. During the process of analysis, researchers are advised to "ask questions of the data," not only the stock questions of social science (Who? When? Where? What? How? How much? and Why?), but also, according to Glaser (1994), What is this data a study of? What category or property does the incident indicate? The Conditional Relationship Guide tool aided in doing this: categories and their properties guided the discussion of the results.

This was a lengthy reiterative process. The data required two different foci: how informal advocacy groups structured themselves and functioned; and how the use of ICT affected this. The researcher kept going back and forth between the two streams, going back to the open coding and the data quotations, changing the importance of categories, regrouping codes into other categories, and reorganizing memos. In constructing the Reflective Coding Matrix, the researcher was able to understand the conceptual relationships and to begin to try out core categories. This was made easier by using the visual relationship network diagrams of the AtlasTi software. Examples of AtlasTI network views are found in Appendix E: AtlasTi Outputs. The process resulted in the choice of an abstract metaphor as the unifying idea of the study. The metaphor was inspired by a participant quotation and was supported by the study findings.

Interpreting and Theorizing

In the final coding process, selective coding, the work of the analysis is integrated. "The principle objective of selective coding is to explain the story line." (Scott, 2004, p. 122). McCaslin and Scott (2003, p. 13) describe theory generation as a three-step process:

1. verification of the process "by examining the consequences of the emerging theory for relevance and fit within the human ecology, as well as credibility, transferability, and dependability;"
2. definition of the emergent theory in relation to the theoretical literature in order to strengthen relevance and acceptability;
3. presentation of the theory as "a concise statement or abstract of the theory generated from data taken from the human ecology, including potential impacts on the ecology."

Quality of Data

Can qualitative research -- subjective in nature and reliant on the sole researcher -- be trusted? According to Lincoln and Guba (cited in Tashakkori & Teddlie, 1998, pp. 90-91), the trustworthiness of a qualitative inquiry is determined by credibility, transferability, dependability and confirmability. Grounded theory techniques tie the researcher to the data so closely that it would be difficult for other research or for researcher assumptions or bias to interfere. In this study, the trustworthiness of research results was supported by the following:

- Prolonged engagement -- The researcher has had several years involvement with informal learning groups so was, on one hand, trusted and familiar with the culture and, on the other hand, aware of multiple contextual factors and multiple perspectives.
- Persistent observation -- The amount and scope of data collected comprised an adequate depth of observation to identify the characteristics most relevant to the data (quality of information).

- Constant comparison method -- The continual re-analysis and re-comparison of data grounded in the relationships and links between data leaves no room for interference from outside ideas or researcher assumption.
- Use of triangulation techniques -- There was a triangulation of sources and methods to increase validation.
- Referential adequacy -- Raw qualitative data will be stored for re-analysis.
- Thick description -- Sufficient detail was provided to support the transferability of interpretations and conclusions.
- Dependability audit -- The process of the inquiry and the appropriateness of shifts in method were described.
- Confirmability audit -- Efforts were made to clearly demonstrate the findings and interpretations of the inquiry were supported by data.
- Reflective journal -- The reflective journal provided data about the "human instrument" and information on methodological decisions.

Researcher Role

During the study, the researcher keenly felt the pressure of her own assumptions and biases about the research as well as the influence of other research and ideas. In the informal world, protocol and propriety are never clear, and informal advocacy groups are constantly buffeted by various partisan powers. The researcher role was protected by the following:

- "bracketing;"
- limiting reading of similar research;
- allowing a cooling-off period after intense personal involvement;
- being faithful to "groundedness."

Phenomenologist theorists assume there are many ways to experience the research problem. In the observation component of this study, the researcher acted as both researcher and participant and attempted to prevent prejudice and maintain objectivity by "bracketing," a phenomenologist technique used to separate the personal voice from the research voice. For example, as the researcher applied technology as a participant of a group and, at the same time, recorded observations; the researcher was conscious of separating researcher knowledge of the study from the experience of generating data.

Limiting reading of the literature or of similar research is suggested by Glaser (1978) as a way of preventing interference from preconceived ideas. During data collection and analysis, the literature was not revisited. However, at times the researcher was struck by how the data illustrated or refuted ideas recalled from the literature review. When this occurred, a memo was attached to that data for later use in the interpretive phase of the study.

The human ecology of the study became increasingly active during the study period due to socio-political events. The researcher's experience as an active participant became intense. At one point, a break of several weeks was imposed in order to simply recover energy as well as create a buffer between the hurly-burly of active participation and further data analysis. Using methods that required constant reference to and grounding in the collected data -- to all of the collected data repeatedly and variously -- forced the researcher to be "faithful" in a way that increases research quality. In addition, the software AtlasTi contains and references the study data well, so that the only accessible data is data formally added to "the hermeneutic unit," and every manipulation of or addition to that data is referenced back to the original words or writing of the participants. During the data collection and analysis, the researcher came to appreciate the power of this groundedness.

Not only did it build confidence and free up new theoretical directions within the realm of the study, but it also revealed facts and guided direction in the advocacy work itself. For example, study data analysis by the researcher (researcher as researcher) indicated a solution to a communication process problem of a participating group (researcher as group member).

Summary

This chapter described grounded theory research, the methodology used in the study. It described decisions made about the research design, the selection of participants, the collection of data, the analysis of the data, the quality of the data, and the ethical considerations of the study, and gave an overview of the research process. In the next chapter, the research results are presented.

CHAPTER 4

RESULTS AND DISCUSSION

Introduction

The study explored advocacy groups as informal learning groups and analysed their use of technology, specifically ICT. Chapter 3 described how the exploration proceeded. This chapter describes the findings of data analysis, identifies categories and discusses them in the framework of informal learners' use of ICT, and uses a reflective coding matrix to identify and contextualize the core category of the study. First, the body of study data and the participants are described. Then the research findings are presented. The research questions guided the organization of the analysis into the following areas:

- the formation and structure of advocacy groups;
- connecting to the wider network;
- accessing ICT;
- learning ICT;
- functions of ICT in advocacy groups.

The exploration produced a large body of data. In each of the five exploration areas noted above, research findings are reported. Categories and their properties derived from conditional relationship guides are discussed, the subsection is summarized, and negative evidence is presented. Next, category consequences lead to framing the relationships of categories and identifying a core category using the reflective coding matrix. The emergent theory is then related to the theoretical literature to test for relevancy and acceptability. Finally, the results and discussion are summarized.

Description of Study Data

Data were collected from a variety of sources as described below.

- Eleven face-to-face interviews: collected during July to October, 2005, audio-recorded and transcribed into .txt files.
- Emails from the core members of Group 2 (one of five groups) during the period August to October, 2005: individual emails were retrieved from researcher-participant email archives and collated chronologically into a .txt file for each of five participants.
- Selected Group 2 documents of the study period: retrieved in electronic form.
- Researcher observational notes and photographs: handwritten during the study period in a notebook or captured by digital camera and recorded as .jpg files.
- Reflective journal: handwritten during the study period in a notebook with some passages being transcribed to .txt files.
- Listserv postings: retrieved February to March 2006 (with permission) from the researcher's email files, copied as .txt files.

The .txt and .jpg files were entered into the AtlasTi software program as data. Thirty-five primary documents existed in the AtlasTi hermeneutic unit. Result citations refer to the primary document number and line number(s). The documents were analyzed and coded. Most codes related directly to the research questions and, although the reiterative process of analysis resulted in dropping, adding and revising of coding, codes were organized into the main sub-question areas. See a code list example in Appendix E: AtlasTi Outputs.

Participants

The study rests on the words and actions of 16 participants (Figure 2). Fifteen were parents advocating for public education; the other was a technology provider. Participants

were members of a loose, informal network of public education advocates. Interviews were conducted with members of five advocacy groups. Of the 15 parent advocates, five belonged to one advocacy group and contributed documents, including email archives from August to October 2005, and eight conducted face-to-face interviews with the researcher: six in the summer of 2005; one a second interview in October 2005; and two in November 2005. Four advocates contributed transcripts of online discussion postings in February and March of 2006.

Figure 2. Study participants and group membership

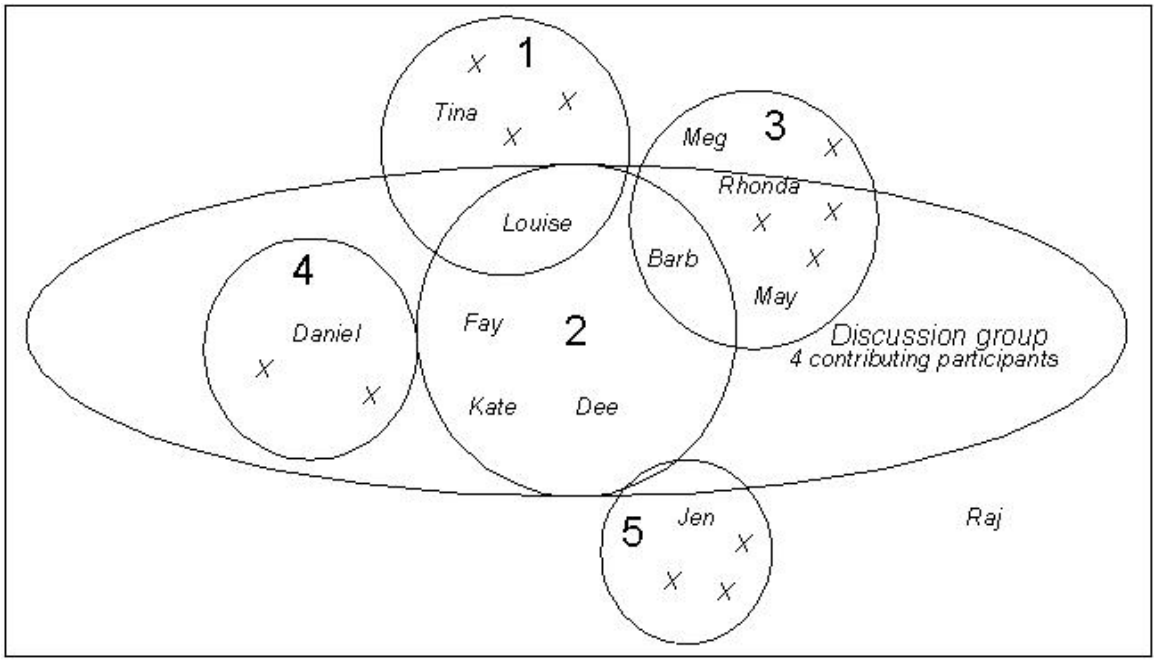


Figure 2 shows circles representing the five groups. The names and "X's" denote core group members. The 12 proper names denote study participants, all advocates but for Raj, the technology provider. The nine interviewees are Tina, Louise, Barb, Meg, Rhonda, May, Daniel, Jen, and Raj. The larger oval indicates the wider network and includes the four discussion group members who are not core members of one of the five groups but who contributed listserv postings to the study. Figure 2 also shows advocates belonging to more

than one group. The participating advocates between them had, at the beginning of the study, 18 children in public schools in Vancouver, in grades ranging from kindergarten to Grade 12. All participants were members, or former members, of their school's formal parent group. Regarding socio-demographic description, participants came from areas across the city -- roughly 36% from a lower third area based on real estate value, 37% from a middle third, and 27% from a higher third. Eight of the 15 advocates had post-secondary education. Thirteen of the 15 advocates were women. Interviewees ranged in age from 28 to 52 years old. All participants were proponents of public education and, based on events in their children's school experience, believed that the public education system was being weakened and needed active support.

The Formation and Structure of Advocacy Groups

This section describes the groups with which the participants worked and presents the results that answer the following questions: Why and when did the group start? What are the group goals? What are the successes and challenges of the group? Refer to Figure 2 to see the group network. Results are presented and categories are discussed at the end of the section.

Group 1 -- The Seismic Safety Group

The Seismic Safety Group was started in 2003 when a parent and health professional became aware of the risk to public school children in the event of an earthquake, and joined with an existing network of advocates. Tina, a member of the group, describes its beginnings, as follows:

> It was Jan 2003, but the issue of course was that many groups had formed and coalesced around the issue. There had been groups at Kerrisdale and Dickens and Livingstone and Lord Nelson and then Van Tech, which was the student-

> led thing with S. And N. had begun to gather parents in a more city-wide approach to the issue. So there were beginning meetings about that.
>
> And at the same time as one of those meetings there had been events in the fall in Italy and in the spring in Turkey where schools had collapsed in earthquakes. And other buildings in the neighbourhood had stood. And that prompted me to take more interest in it and to figure out the issue locally. And I went to these meetings that these guys were organizing and I wanted to know more about all the other schools, not just Van Tech or this particular one.
>
> I happened to talk to this lobbyist and asked what could be done about this. And the lobbyist advised, "Well, there are three key things in effective lobbying: the information, the information, the information. You have to have bullet-proof facts. Put together a research document that lays out the problem, that makes condemning comparisons to other jurisdictions and lay out the solutions because the government isn't going to figure it out." So I thought, "OK fine- a research paper" and talked to some of the people at one of those meetings about it. And in the end, nobody really had time to work on it -- it was faster just to do the research. So I put together the research paper and happened to randomly make these other contacts and pulled N in who sort of pulled the whole coalition in and we began to lobby. (Tina, Document P6:0003-0022)

Approaching the problem as a public health issue, the original member/researcher and the school groups began advocating for action and quickly attracted a working group of parents. The Seismic Safety Group has a single, clearly defined purpose: to bring all BC schools up to acceptable seismic life-safety standards. They have raised public awareness, brought in the expert geo-science community to complete an inventory of the seismic safety of all BC schools, and lobbied for funding for school seismic upgrading. The provincial government has since committed funds and designated a completion date for school upgrading.

> The main successes would be the 1.5 billion dollar promise they got from the provincial government in the fall of 2004 which has been followed up by some money and lots more promised money. And certainly more public awareness, front page coverage, lots of media coverage, a lot more interest by the public and of staff working in the system. There was a whole lot of education that went on to make people realize that the issue was an important one. (Louise, Document P7:0018-0022)

The Seismic Safety Group, consists of a core group of members who have settled into defined roles. Other people move in and out according to their availability and motivation.

> At the middle we have three directors. One of them is very much involved with direct government lobbying and doesn't really get involved with the other people. One has leadership in terms of energy and motivates the core. A third coordinates--these are all informal roles. From there there's this big support group of parents and that's done through email mostly and meetings. (Louise, Document P7: 0045-0048)
>
> We're just a name and an entity really. I mean we had some meetings. But considering how few face-to-face meetings we actually had as a group and considering how loosely-defined our structure is--I think there was a total of 5 face-to-face meetings. (Tina, Document P6:218-220)

Another member described how she came to the group:

> I came across an article about them and I wanted to email the woman whose name came up -- I thought it sounded interesting. I wanted to congratulate her on some work she did and the next thing I knew she had emailed back and asked me to do something for her and did I know so and so and could I find such and such article and that was that. (Louise, Document P7:0009-0011)

Group 2--The Public Education Policy Group

The Public Education Policy Group was one of several groups growing out of a 2002 city-wide, grass roots response to the announcement that new provincial education policies would require budget cuts totaling $25 million for Vancouver schools. Parent Advisory Council members, calling themselves “Save Our Schools” (SOS), met in a Vancouver living room and within just two weeks, collected more than 14,000 letters to the Premier and the Minister of Education supporting their campaign. All education partners supported this effort, including Vancouver school trustees and the District Parent Advisory Council. The SOS effort was a catalyst for various advocacy initiatives.

To move the public education funding issue forward, the Public Education Policy Group formed in January 2004 to take a more focused role in protecting BC's public education system by promoting public education principles, promoting public discussion, and

sponsoring and publishing research. Its main goal was public education funding policy change. The Public Education Policy Group has published a school tracking survey, participated in policy development at local level, communicated a parent point of view through the media, and lobbied for policy change.

> I think it's been quite successful in terms of increased awareness of education funding issues, lots of funding that has come back. Certainly there was pre-election money that came back into the system and this was the first year that we didn't actually have cuts for as long as I can remember. (Louise, Document P7:0026-0028)

At the time of the study the Public Education Policy Group consisted of five directors. The group is linked to other groups with similar mandates.

> Five directors in the middle. We officially have named roles but they don't seem at this point to be terribly relevant in how we operate. (Louise, Document P7:0057-0058)

A member described how she connected to the group:

> I went to a meeting at the Jewish Community Centre and joined in the second letter-writing campaign and stuck with it from there. (Barb, Document P9:0004-0005)

Group 3--The Inner City Group

The Inner City Group was formed in 1997. "About 8 years ago, a parent at one of the elementary schools here realized that there were a number of issues that were common to inner city schools that were not really faced by a lot of other schools." (Rhonda, Document P10:0004-0006). That parent connected to others to bring the voice of parents at inner city schools to the table.

> We met in an area meeting. At that time there were a big bunch of cuts. It was time when the VSB (Vancouver School Board) and the Ministry was trying to do a review of the inner city funding. And the VSB was doing it in some way that the Hastings parents thought there must be a much better way. The VSB was using the stats from five years ago. So we tried to advocate. We went to area meeting. Then we thought that maybe we can start a group so that we speak for everybody (names many inner city schools). And then some parents are not that familiar with inner city issues so -- actually at that time I know

> nothing -- so then we start meeting in someone's kitchen. It was maybe 1 year before we started really forming a group and having our own terms of reference and talking to the VSB saying that we were really a group. (May, Document P12:0122-0131)
>
> The specific goals included ensuring equity for inner city kids. One of the huge successes was getting the 2.8 million reinstated for the inner city funding a couple of years back. (Barb, Document P8:0008-0012)
>
> . . . but some of our most recent successes were all-day kindergarten that we continued to lobby for and starting up the Vancouver inner city advisory committee again with the school board which had been let lapse for a year -- on those things the consistent voice finally got action. (Meg, Document P13:0010-0013)

The Inner City Group has succeeded in being seen as a credible parent voice.

> A lot of people recognize us, a lot of people from outside the school system, so they're aware of the group. A lot of the local MLAs are aware. I think just the fact that -- people know that we're out there that we're sort of monitoring things. (Rhonda, Document P10, 0126-0128)

The Inner City Group continues to identify needs, sit on policy committees, and submit budget briefs that present the needs inner city parents identify for their children.

The Inner City Group has a working group of eight and a wider school-based participation.

> There are sometimes other parents coming and sometimes when there is sort of an emergency issue, then there's a great callout and at that time I've seen meetings of 40 parents .Then there's the larger group of schools that we communicate by email. (Meg, Document 13:0021-0023)

A member described the genesis of the group:

> And it initially came together just as a support group and to talk about ways to connect with the system better. (Rhonda, Document P10:0015-0016)

Group 4--The Public Dialogue Group

The Public Dialogue Group was loosely organized by one parent activist: its membership fluctuated according to the issue at hand. It also had roots in the 2002 city-wide, grass roots response to education funding cuts. The central member linked to and promoted existing or emerging resources:

> So we were able to combine a variety of school-based email links and networks, the blog for posting, and it wasn't just mine. So it's kind of this sort of distributed anarchist syndicate kind of structure -- (laughs). In terms of the technological way it distributes action and if there's a widespread thing, many different sources, what strikes me though is there still needs to be some sort of coordination. (Daniel, Document P14:0082-0088)

Although the core of the Public Dialogue Group appeared to be "one guy and a blog," the central member actively sought and supported other groups and promoted dialogue by publicizing and collaborating in events and by distributing models of advocacy through the blog.

> But we're building upon, you know, like the work that L did at her school, which is phenomenal -- bringing out those parents, we were able to do it at K, at T, at V, I know people were going down to the picket line at G -- I don't know how many schools but I hear all across the province -- so there's a wider process occurring. But then these kind of things become one more tool, you know. (Daniel, Document P14:0092-0098)

The group formed and reformed in various configurations, depending on events.

> Anyway, the listserv, I think they have about a hundred people right now. And there's been new people asking to sign on since the strike. And some of the old people have asked to be removed. (Daniel, Document P14:0089-0091)

The participant described the group's manifestation at the time of the study as "just a fluke and an accident" (Daniel, Document P14:0041) triggered by an event:

> When the teacher strike came along, I started circulating a letter. And I thought I need to have some place for other people if they want to find the letter and I thought, Oh well, I'll just put it on my blog where I started this journal. Then I thought this is a bit of a problem because the journal was specifically targeted for (another group). I had to do something so I looked at the blog software and I saw, "Oh I can actually unpublish what I published" -- so I turned all the previous messages to draft to solve the problem, changed the name to "In Support of Public Education" -- and posted that letter there. I saw, much to my surprise, that people actually started using the comment function. (Daniel, Document P14:0043-0051)

Group 5--The Provincial Network Group

The Provincial Network Group is a public education advocacy group with provincial scope. It is a continuation of an initiative started by educators that gathered feedback from around the province to create a central document expressing a vision of public education. A central document was written based on feedback from approximately 1600 people.

> And we didn't want it to end up being a static document that just hung on everybody's walls and looked pretty. We actually wanted it to be a discussion tool. (Jen, Document P15:0010-0012)

The Provincial Network Group wanted the provincial-wide dialogue to continue because:

> One thing we learned traveling around the province was that every community has different concerns. A lot of the principles we heard repeated throughout the province, but the order of priority was a little different depending on where you live. So what we found was that the solutions had to come from the communities. And that's not going to happen unless the communities come together and actually have dialogue on what's important to them and what they want the future of their community to look like. (Jen, Document P15:0038-0047)

The Provincial Network Group promotes public dialogue on public education and has developed fundraising and research arms. The Provincial Network Group, at the time of the study, had a board of 12 members and a loose provincial network.

> We see ourselves as a network and what we want to have is hubs all over the province. (Jen, Document P15:0065)

Discussion of Results

The data described why and when the groups in the study began and their goals. Groups formed into loose, centre-out structures. There was a range in degree of formality, and in the number of advocates in the central “core group.” The work of the groups was briefly outlined.

Categories and their properties derived from the Formation and Structure of Advocacy Groups results are presented in Table 1.

Table 1. Formation and Structure of Advocacy Groups: Categories and Properties

Category	Properties
1) Sparking connection	a) Awareness of problem
	b) Identifying self in problem scope
	c) Connecting with others re problem
2) Identity	a) Focus
	b) Credibility
3) Informal	a) Inclusive
	b) Open
	c) Fluid

Category 1: Sparking Connection

Among the advocacy groups under study, there appeared to be a process, termed "Sparking Connection," which caused a group to form in order to address a problem. The process was characterized by connections: connections existing in the learner's life that brought in new information; the connection the learner made with the problem; and the seeking of connections with others to address the problem.

a) Awareness of the problem

For the study participants, advocacy began with awareness of a problem. Awareness came from being connected to aspects of the problem through everyday life, through professional life, through social life or through civic life. Through connections in these

spheres, participant awareness grew to a level that precipitated advocacy. In some cases, a discrete event catalyzed advocacy: participants reported an earthquake, education funding cuts, and a teachers' strike as discrete events that prompted advocacy efforts.

b) Identifying self in problem

An essential property of this category is the instant when the learners first identify themselves within the scope of the problem. For example, the central member of The Seismic Safety Group reported that her realization that schools were the only buildings in their neighbourhoods to collapse in earthquakes in Italy and Turkey "prompted me to take more interest in it and to figure out the issue locally."

c) Connecting with others regarding the problem

Having awareness of the problem, participants were attracted to others addressing the problem. They reported connecting by:

- contacting an advocate by email after reading an article;
- attending face-to-face meetings in schools, in community centres and in homes;
- connecting through blog postings.

This connection was the beginning of participation in a group and the beginning of their informal learning as a function of that participation.

Category 2: Identity

Participants repeatedly referred to group identity. Group identity can be perceived like a Janus mask looking both inward and outward. Inside the group, identity affected focus. Outside the group, identity affected credibility.

a) Focus

Participants recognized the importance of the group identity being clearly understood by group members.

> The seismic issue was really nice and simple. Boy -- we didn't need very many things because it was so straightforward. (Tina, Document P6:390-391)

Within their groups, participants reiterated group identity to focus on action, as illustrated from the following internal group emails:

> I think it's helpful to remember our watchdog role. (Kate, Document P4: 1020-1020)
>
> But if we don't speak on this, who will? (Kate, Document P4:1013-1013)

b) Credibility

Outside the group, participants reported their efforts to establish the identity of their group as credible. Past projects, member commitment and taking opportunity were used to establish credibility.

> As to what PPG is--that was one of the reasons I rearranged the website front page -- to show the concrete work of survey, etc.--as a representation of our credibility as a parent voice for public education. (Kate, Document P4:10:10)
>
> But we thought we could just come in and say, “Here we are, this is our message -- we're not employed here, we're not getting paid, we're volunteers, we care about this, this is an issue we think is important for everybody.” (Louise, Document P7:195-197)
>
> Let's take this opportunity to say who we are. (Kate, Document P4:417-418)

Another participant used reference to past accomplishments, to group media coverage, and to her larger network to claim credibility to an administrator in the formal system.

> And it was right around the time of the McLean's article and plus we had the assessment. I said tell your principal that the province is taking this issue seriously and read the assessment of public school buildings and see how many school buildings are at high risk. He can see that actually the government is taking it seriously, the engineering community is taking it seriously. (Tina, Document P6:0253-0258)

Outside of their groups, some participants experienced frustration and difficulty in establishing their identity in the larger environment:

> I would say that some of the main challenges have been the public perception of exactly who we are, who our members are. . .(Barb, Document P9:18-19)
>
> The government's perception was that we were being managed by the unions. (Barb, Document P9:23-24)
>
> The school board recognized that we were not just a fly-by-night, whining group... (Rhonda, Document P10:29-30)

Category 3: Informal

Participants reported that group processes and roles were informal, not tightly controlled. Processes were inclusive and member-driven -- advocates chose how they participated. The properties of this category are “inclusiveness,” “openness,” and “fluidity.”

a) Inclusiveness

Advocates made a conscious effort to be inclusive and to work in an accessible way.

> I think that part of what's made this group successful is the informality -- I mean a lot of people come into the group without a lot of skills -- and quite nervous about challenging authority or having the ability to do anything or feeling that they can have a voice. So there are people who come in and they just sit and they won't say very much but I think they feel welcome. I think that's a lot of it that we are very informal and welcoming. (Rhonda, Document P10:189-190)
>
> As an informal group, this is my favourite group to go to. Because people are welcome, it's about specific issues, there isn't a formal agenda and a Robert's Rules but everything gets taken care of in the meeting. You leave the meeting and the tasks are delegated. Everyone knows what they are going to do and every one comes back within a time frame. It's just a nice healthy working group. (Meg, Document P13:0232-0236)
>
> So I was with them -- in the beginning it was meetings, but it turned out to be like friendship and then I really enjoyed the meetings. (May, Document P12:0110-0113)

b) Openness

The structure of the groups was open and relied on members bringing forward ideas to shape action.

> And it was a bit of a problem at the beginning because it seemed to me that we could just have this organic structure. And people were used to the idea that somebody had to be at this title and at that title and I thought--Well can't

> anybody who wants to just do it -- can't we not just go do it? (Tina, Document P6: 24-25)
>
> It's always been a really informal group. We don't have bylaws per se. We sort have an agreement of what the group is there for. (Rhonda, Document P10:0104-0106)
>
> We didn't try to tell people what to say. It was just if you feel support, if you feel strongly: come out. So it was kind of neat that way. (Louise, Document P5:0101-0102)
>
> There is no ownership of this issue, so if anyone has a good idea, by all means, take it and run with it, with our sincere appreciation. (DS, Document P34:0086-0087)

c) Fluidity

The active membership and role designation were fluid. Because the advocates' motivation was linked to their children's public education experience, the children's progression through and out of the K-12 system affected group activity. Participants reported that a pragmatic approach was used to decide who did what and showed impatience with formal role definition. Availability, energy level, ability, and personality were factors in taking on a role.

> Kate, you have time now. Would you like to be our spokesperson for this one?
>
> (Louise, Document P5:73-74)
>
> We have a fluctuating core you know -- it depends on who's got the pep and energy. . .you know, whoever is there at the time and it's mostly the core, therefore they're the core. (Tina, Document P6:131-132)
>
> The rest of the panel members were just sort of trusting that I understood that. They let me oversee the development of the website. (Jen, Document P15: 145-147)
>
> An on-line petition has now been set up by Web-savvy mom. (DS, Document P34:25-26)
>
> Fay is so often our voice of sober, second thought. I think we need her to weigh in before we proceed. (Louise, Document P5: 2032-2033)

Summary: The formation and structure of advocacy groups

Informal advocacy groups formed when an event or critical accumulation of connections sparked awareness of a problem. By identifying themselves in the scope of the problem, individual advocates then sought others to work collaboratively to address the problem. Identity was a main concern of informal groups--identity was reinforced and reiterated within the group to maintain focus and outside the group to maintain credibility. The groups adopted informal structures that were inclusive, open, and fluid.

Connecting to the Wider Network

This section presents the results of exploring the connections made by participants. Results indicated a wide scope of education advocacy and described a range of relationships across this scope. Figure 2, provided at the beginning of this Chapter, illustrates the study participants in their advocacy groups within the larger public education advocacy network. That network is itself embedded in an ecology that includes the following:

- the public (or larger society);
- the K-12 (kindergarten to Grade 12 public school) parent population;
- the local K-12 school system;
- the provincial public education system;
- government;
- the media.

Results describe connections in these areas and answer the question: How do group members do things with other groups? The incident frequency of codes “connecting to people” and “connecting with other groups” was very high (196), nearly five times higher than the

frequency of the code "communicating inside the group" (43). Clearly, external connections were extremely important to advocates.

Connecting with other groups

Participants expressed that connecting to wider network was important in order to "come together to achieve our shared goals" (Louise, Document P5:1623-1626), for information sharing and collaboration, and for support. They openly acknowledged ties with the larger network:

> By the way -- this is just building on advocacy efforts already launched by the Simon Fraser Society for Community Living (which issued a position paper) and BCASE, the association that represents special education administrators (who first raised the issue in a letter to the Minister) and LDA BC--Tri Cities, which has enlisted support of various key groups including the Coalition for Special Education and the Special Ed Partners Working Group. Thanks for the support everyone! (DS, Document P34:0103-0104)

and conceived of single advocacy efforts, however small, "as one component of our collective and ongoing advocacy efforts"(Louise, Document 34: 0092-0093). One participant reported "We need that broader network in order to have impact" (Jen, Document P9:0138).

Connecting with the expert community

The network was important to advocates for information-sharing and collaboration. The open relationship with other groups was described earlier. The importance of a relationship with the expert community was also noted. A participant stated "... it was really key to form a partnership with the expert community, to create acceptable information and to lay out the solution for the government" (Tina, Document P6:0045) and also identified that seeking this relationship was "the first thing" to do in order to "have them also advocate to government and support the case" (Tina, Document P6:0059-0060). Further, lack of

collaboration was seen as a problem -- a participant used the metaphor of a “fractured voice” in the following quotation:

> And nobody is putting the two messages together and delivering it to government at the same time. So your expert voice is fractured here and you guys need to get it together to make joint documents and present them to government. Because they all say "Why do these terrible things keep happening, nobody listens to us -- Governments around the world fail to act when we know these things are going to happen and there's so much we can do." But the fact of the matter is they are not putting this information together, the two halves of the story. (Tina, Document P6:0090-0095)

Connecting with the K-12 parent community

Much of the group activity was based in the K-12 parent community, outside of the formal structures of the local K-12 school system. Advocates connected in the everyday places of their lives such as the home (May, Document P12:0129), the community

> Um and it really came down to me running into another parent -- we were dropping off our kids at a dance class on a Saturday. . . (Louise, Document P29:0018-0019)

or at the school gate, “especially in an elementary school when the parents come to pick up the kids. All the parents are in the courtyard” (May, Document P12:219-221).

The K-12 parent community was a main conduit for disbursing information. “And parents talk together -- they spread it out.” (May, Document P12:084).

Connecting with the media

Advocates sought a relationship with the media. They identified the media as playing an important role in “raising awareness” of government

> Our main success was to raise awareness. We got some really good media coverage, we got some really good press, I think that politicians were made aware. (Barb, Document P9:0011-0012)

and also of the public. “If there is media coverage, they hear” (Rhonda, Document P10:0180-0181). Advocates maintained media contact lists including local and national print media,

radio and television (Dee, Document P2:0507-0509; Barb, Document P9:0099-0100; Rhonda, Document 10:0149-0153). Some participants reported the relationship was reciprocal:

> The smaller papers phone us for comments on arising issue. (Barb, Document P9:0100)
>
> She (national journalist) said she'd call us in future for comment on education issues. (Louise, Document P7: 0462).

Another participant stated ". . . news coverage in and of itself doesn't cause things to happen, but the combined weight of such activities adds up and can provide significant social pressures which might actually lead to something" (Daniel, Document 34:0080-0081).

Connecting with the local school system

Advocates reported relationships with teachers and administration within the local school system, either through their group

> Our email is maybe 100 -- it's pretty big. And actually, some of the VSB (school board) biggies and some principals are on the list -- they want to know what's happening. Why not? (May, Document P12: 0149-0150)

or through their parent experience (Rhonda, Document P10:0082-0085, 0179).

> Parents get their information from their local newspapers, community newspapers, friends, talking. Certainly from their children's teachers, if they have built a relationship there and are involved, and just what they observe in their own schools, they see what's going on, they see what's happening. (Louise, Document P7:0178-0180).

Another school-based relationship was the advocate relationship with the formal parent group of the local school, the Parent Advisory Council (PAC).

> … when the school wants to share information with the parents and to have feedback registered. They want approval or they want how the parents feel about. Like a few years ago when we had that big cutback on the school-liaison police officers -- so they had to tell the parents what was happening. So they would do it in a PAC meeting. (May, Document P12:0056-0060)

One participant differentiated the set PAC meetings from other parent-school activities. "When you talk about PAC, it's a monthly meeting. But what happens when you have the informal things like the parent walkabout, the staff appreciation lunch, the parent-teacher interviews -- they're also PAC, right?"(May, Document P12:0048-0050). Groups also had a relationship with local school trustees and participated on a local level (Louise, Document P5:1369).

Connecting with the provincial public education system

Groups connected to the formal system through the BC Confederation of PACs (BCCPAC), the formal structure for K-12 parent-government relations

> We jointly draft a letter and jointly add/delete from it and send them our position on inner city needs so that they will take our message further to the province. We occasionally get a letter back -- I think we send more than we receive. (Meg, Document P13:0095-0098)

as well as more informal strategies

> Please take a moment to sign the petition and pass this along, urging relatives, friends and ordinary citizens to help us reverse the Ministry's decision. (DS, Document P34:0028-0029)

The groups contacted all levels of government in order to lobby for funding (Louise, Document P7:0164-0165), to be heard on their issue and to ask for information. Participants reported the relationship could be uncertain.

> . . . I think that was even mentioned in some of the Ministry announcements that they had heard from parents. I think we are heard--I don't know if we're always listened to. (Louise, Document P6:0170-0172)
>
> Well, we want action from the Feds too which we still haven't gotten of course but we're still hoping -- may happen. (Tina, Document P6:0126-0128)

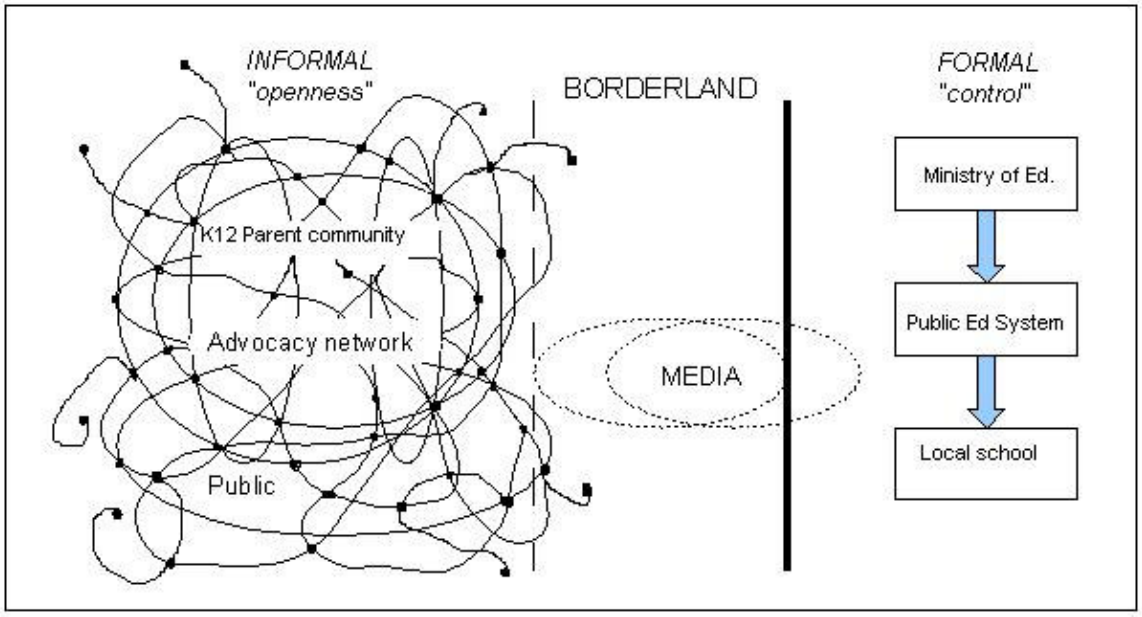
Groups contacted MLAs "about funding, about ESL issues, about gaming. Not only School Act stuff--not just Education, but things that affect education" (Rhonda, Document P10:0116-0118; Barb, Document P8:0068-0069).

Advocates sought connections to the wider network in various ways -- through exchange of newsletters and reciprocal website linking (Barb, Document P9:0108-0109), through membership across groups (Barb, Document P9:0108-0109; Dee, Document P2:1036), through formal conferences (Fay, Document P3:0093-0094), and through everyday life connections (Louise, Document P29:0014-0017; Daniel, Document P14:0064-67). Results show advocates valued the wider network because it connected them to information, enabled collaboration, provided support, and strengthened their ability to advocate.

Discussion of results

The concept of "borderland" is used to help frame the discussion of the results of "Connecting to the Wider Network." The borderland is a conceptual space between informal and formal systems. The borderland is a potential meeting place of informal and formal systems, but is characterized by tension (Figure 3).

Figure 3. Borderland as tension between formal and informal



In the study, the advocacy groups are an informal system challenged to make successful dialogue with the formal public education system. The formal public education system tries to communicate with and gain the support of the K-12 community. The formal system is hierarchical, uses top-down processes and is characterized by control. The informal system is a loose network of connections, and is characterized by openness. The media is located in the borderland and potentially supports a place of dialogue: however, as the study results showed, the media often operated for the formal system. In the borderland, the informal and formal systems seek connection, and when successful dialogue occurs, the problem begins to be solved, as expressed in the following quote:

> It's such a relief now that the issue's in the paper we don't have to be in it at all. It's beautiful -- the School Board is saying it has to be done and has the issue on its website. It's such a relief! . . . every one else is on the job now. (Tina, Document P6:0264-0266)

Yet results indicated that successful negotiation was difficult to achieve, and affected by degrees of voice, control, and common ground. Categories and their properties derived from the "Connecting to the Wider Network" results are presented in Table 2. These categories are a continuation of Table 1.

Table 2. Connecting to the Wider Network: Categories and Properties

Category	Properties
4) Voice	a) Representing
	b) Listening
	c) Simple language
5) Control	a) Barriers
	b) Spin
	b) Frustration

6) Common ground	a) Common experience
	b) Culture
	c) Trust

Category 4: Voice

Results recognized the importance of voice. The function of voice was representing, and true representation was grounded in listening. To be effective, a voice used simple language. The properties of Category 4: Voice are "representing," "listening," and "simple language."

a) Representing

Results showed that advocates had a critical understanding of what fair representation was and expressed a concern for broad or balanced representation. "The government must listen to a variety of voices that accurately represent communities." (Louise, Document P5:1877-1879) Part of their work was to promote fair and balanced representation.

> You know the Fraser Institute puts out these ranking based on test scores: what we want to do is not to rank school but sort of counterbalance that and shows what the schools are doing right, you know. (Jen, Document P15:0059-0062)

A group document promoted the representative role of school trustees in a pre-election publication as follows: "Your elected school trustees often consult with and listen to community members and stakeholders in the public school system to ensure their decisions reflect local needs and priorities." (Louise, Document 5:1066-1067)

Advocates were concerned with how a voice was made, and were conscious of representative roles in the study ecology, including their own. Participants "didn't try to tell people what to say" (Louise, Document P5:0101). Responsibility to speak for others was described as follows: ". . . to find ways to advocate for inner city schools that didn't have a

real strong voice in the system recognizing that there are a lot of parents in those schools who are really unable to contribute for a whole bunch of reasons whether it's poverty or language problems or personal issues" (Rhonda, Document P10:0011-0014). Advocates recognized the value of diverse voices and their role in representation, for example:

> Well I think that the group has always really striven to um represent people who are not necessarily who the group is made up of -- the group tends to be middle-aged, middle-class white women and I think we really made an effort to think about who were there representing and not speak for ourselves only. (Rhonda, Document P10:0018-0019)

b) Listening

Advocates identified accurate representation as being based in listening and were consciously receptive. Advocates were concerned that representation was grounded in real and sufficient feedback: "How are we listening to parents' points of view?" (Kate, Document P4:0584); "So the report is a lot of the voices we heard around the province" (Jen, Document P15:0153); and "I think we try really hard to listen to what the issues are and not just bring forward our own issues." (Rhonda, Document P10:0198-0199). One participant was concerned about collecting sufficient feedback:

> With 12 people at the PAC meeting how can I say I speak for the school parents if I haven't collected the information. People just want to give their feedback without coming to a meeting. If they are not coming to a meeting they should not be denied the opportunity to voice a concern. (May, Document P12: 0096-0099)

Advocates were critical of groups claiming to speak for others, but who fail to ground their representation in listening. "They think the executive IS the PAC and thus should make decisions FOR the membership, while I like to remind them they should take direction FROM the membership." (Louise, Document P5:0740-0744). One participant referred to not listening as a "shame" as well as "faulty."

> The shame is that not only are they NOT listening to many parents, but that by failing to get feedback from more diverse groups, they have a faulty

> understanding of real concerns AND of public opinion--very obvious in this current situation.(Kate, Document P4:0905-0906)

Not being listened to frustrated advocates.

> And he said "I can't get my principal interested in this issue, he thinks it's a crock. What can I do?" (Tina, Document 6:0252-0253).
>
> “Once again, I don't hear my voice in our provincially funded "collective voice" of parents.”(Louise, Document P5:1405-1406).

c) Simple language

Advocates identified language problems (Rhonda, Document P10:0014) and the use of complex language by the formal groups as barriers to participation.

> The one way set up for parents to interact with school is the PAC system. I don't think it has been successful. No, I don't think so. ‘Cause sometimes you try the PAC -- "Take 1 VP time and 2 FTEs” -- who can understand that? (Laughs.) (May, Document P12:0040-0046)

The same participant preferred to “just make it very simple -- very easy to understand. And there are other ways -- just talking in the school courtyard or calling people in the community. It's very efficient. You just tell the parents in very simple terms what's happening. You don't need to give a lecture or those FTE things.” (May, Document P12:0228-0231). A similar suggestion was made to an expert group.

> First of all you're not explaining things very clearly and second of all we're just not hearing from you very much. So you need to get better about that. I think that when we hear from you we believe you -- we do. So you just need to pipe up a bit better and say it in ways that we can understand. (Tina, Document 6:0071-0074)

Because the informal groups saw the complex language used by the formal groups as a barrier, they promoted the use of simple language to increase the wider community's understanding of their issues.

> I had the opportunity to review the guide along with other PAC people at the BCCPAC fall leadership conference. There was quite a bit of useful information in the guide, but unfortunately it was written at a very high language level and was full of edu-speak--to the point where many of the PAC

> people reviewing it didn't understand it--and there were no reviewers who were ESL so it wasn't a language barrier thing. I think this is always a problem when you get groups like trustees, principals, bureaucrats, teachers and parents who have been in the system for a long time writing for the average person, who simply don't understand (or care) about education jargon. (CF, Document P38: 0001-0010)

However, as seen in the following example, they became adept at framing communications to a formal system group in language that was not complex, but "acceptable." One group had worked diligently to frame the language of a brief in a way that responded to formal system needs; their efforts were so successful that a superintendent (member of the formal system) made the assumption that the well-written brief was not the work of the advocacy group, but rather the work of the formal committee.

> When we had the big cuts a few years ago we sent out a brief. And that superindendent X, he took it to the advisory committee. He thought they wrote the brief. He brought the brief and he said "This is so good. This is just what we want. Blah blah blah." I was sitting there and I thought, "Oh my stars! Then the chair said "It's not written by us." Yeah. (May, Document P12:0181-0185)

Category 5: Control

All results in this category relate to the formal public systems--the provincial or local government, the education system and local school system, a union or an institution--or to the media. (That there was no evidence in the data of control pertaining to informal systems underlines their quality of "openness.") One advocate characterized working with controlled systems as follows, "And that's been the uphill battle -- how do we overcome the internal politics in BCTF, in BCSTA, at all levels of governments."(Jen, Document 15:0344-0345). The properties of Category 5: Control are "barriers," "misinformation," and "frustration."

a) Barriers

Advocates reported that formal systems used inflexible and inaccessible processes that acted as barriers to communication or interaction, for example:

> We don't always receive a written response and often the written response is not a real response, just a form letter sort of acknowledgement. We don't always get an answer to our question or we don't always feel that they've addressed our concern… (Rhonda, Document P10:0120-0123)

Some processes were perceived to be "phony." One participant wanted to see "more and more partner groups actually working together and not in a fake you've-been -chosen-to-be-part-of-this-group sort of way. There's a lot of that phony, picking your own answers things." (Jen, Document 15:0319-0322). Some formal processes were perceived as purposely manipulated.

> I am especially concerned with the government limiting parent feedback to BCCPAC . . . most of all by the fact they receive most of their funding and direction from the Ministry they are supposed to advise. The MoE has done well by the "BCCPAC official voice" strategy and regularly uses the relationship to make the perception of listening to parents and widespread parent support. (Kate, Document P4:0905-0906)

The overwhelming bureaucracy of the formal system was a barrier for one participant.

> And sometimes, as an immigrant, I find the system quite complex. (Sighs) You need to spend time to find out what's happening with all these different layers, and different funding issues. And I find the funding issues quite -- you know-- you got money from the Ministry of Education, the Ministry of Children and Families and then you got money from the VSB. Understanding that is sometimes quite challenging for parents. (May, Document P12:0035-0044)

Control of communication systems was also a barrier. A participant wished that "any parent, not just a designated parent, could send an email to inner city parents. But that would have to go through the school -- be controlled by the school."(Meg, Document P13:0220-0222). She felt the one option (faxing schools) available in the schools was insufficient.

> You know you've given out that information -- it went out -- you saw it -- and it was received, hopefully at the school office. But where we're really having some concerns is that we don't know if it was ever read by the parents. Is it being read? Is it being shredded? Is it getting to the PAC mailbox? Is it getting there in time or by the time parents see it is the meeting already over? (Meg, Document P13:0187-0192)

This is an example of a borderland incident: the formal process did not meet the requirements of the advocate in the informal system. Of course, one way to avoid the borderland is to

establish a wholly informal communication system. This was done in another reported incident. A participant described finding information, during a teacher job action, on a teacher website “that was a private commercial site that was set up because their assets were seized. It was clearly and explicitly their site, but it was completely off the (public) server and used proprietary software” (Daniel, Document P14:0123-0127).

Formal systems, being funded, had the ability to buy control. ”They put a lot of money into advertising and into public relations. So we sort of feel a little bit like we're the David up against the Goliath.”(Louise, Document P7:1601-1608). The same participant considered it “a big challenge to get out there and get the message out when you don't have any money when other well-funded groups have money. And getting our own credibility so we are recognized as a valid voice and are heard on our issues” (Louise, Document P7:0038-0040). On the other hand, another advocate differentiated her informal group's position on money from that of formal groups.

> She had me come to her class to talk about advocacy and public policy and a guy from the Civil Liberties Union was there and from a construction union. Both of them said it would be good to have more money so they could do more advocacy. And I said I don't want more money -- that's just a big headache. It makes everything more complicated. It's much easier NOT to have money. If you have money, you have to have a bank account and everything's so much responsibility and everything's way too complicated. I mean we want the buildings fixed but I didn't want us as an organization to have money. (Tina, Document P6:0210-0216)

b) Spin (Misinformation)

The control of information was a source of concern. One participant “felt that there is a lot of information out there that in our eyes was misinformation or didn't really represent what we saw happening in the schools” (Louise, Document P7:0190-0191). Advocates were frustrated when they perceived the media was suppressing information or controlling information.

> Interesting. After hearing from (newspaper) staffers that the letters to the editor they're receiving are overwhelmingly supportive of the teachers, today they actually didn't print any letters at all. (Louise, Document 5:1552-1554)
>
> Yesterday's press release was written by B and C. Apparently, they literally tore up the original release written by A's media person, and told A to read the BC one instead. I was right! They have sucked A's brains out & are controlling her . . . (Barb, Document 1:1037-1038)

After the publication of a group newspaper piece was dropped, one participant suggested distributing the information through alternative media.

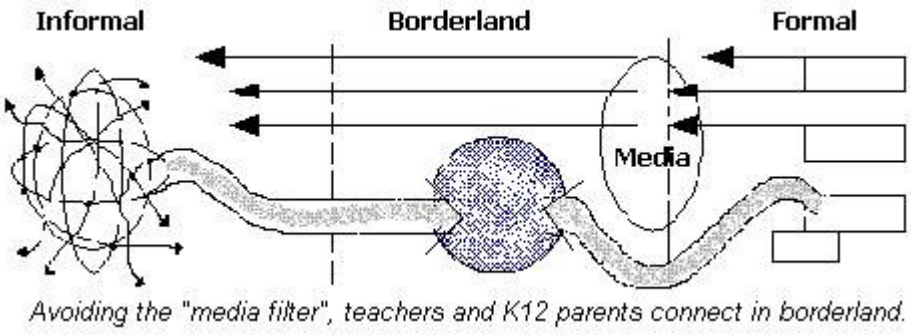
> Gee, I guess the levels of trust go down another notch . . . Any alternate placements--as in very soon? If not, let's just publish it on our website. (Kate, Document P4:1098)

Another advocate recalled the barrage of anti-teacher media messages during the October, 2005, teacher job action and described a successful dialogue between K-12 parents and teachers that occurred by avoiding "the media filter."

> An idea I have came from the meeting our teachers held with parents the night before they walked out. It was a mature, honest discussion where teachers were able to explain their personal reasons and experiences that led to their decision to go out. Parents were able to listen without the media filter, and ask their questions and have them answered by the teachers they see every day in the schools. It really struck me as a healthy and useful way to communicate in a mature way about something we all care about — public schools. (Louise, Document 5:1609-1620)

The barrage of information from the formal system and its relationship to the parents and teachers moving around it is illustrated in Figure 4. Note that the teachers consciously moved toward the informal system.

Figure 4. Avoiding media control



Avoiding the "media filter", teachers and K12 parents connect in borderland.

c) Frustration

Control of communication, identity and access was extremely frustrating to advocates. Frustration led to action, as can be seen in the following quote:

> This thing is getting more worrisome by the day. This morning's rain has brought some dark thoughts about this dispute going completely sideways . . . and on and on until we're left with a far more demoralized and fractured school system than we ever imagined. Or maybe my PMS is just acting up. I've been trying to think of a role for the PPG to play in this. (Louise, Document P5:1601-1608).

Participants' frustration with misinformation initiated a watchdog role.

> . . . remember our watchdog role. Why should a publicly-funded organization be allowed to get away with misinformation again and again and again? (Kate, Document P4:1020)

Category 6: Common ground

Advocates referred to having a "common ground" as being the basis for coming together and the basis for making a stronger voice.

> So we find out gradually and then we feel quite connected because they have the same issues so we work together. They understand our issues and we understand what is happening in their school. (May, Document P12:0117-0120)

Finding common ground "brought down barriers" and was "empowering."

> For me the process was more inspiring than anything else. Because it was great after three hours to watch all these people -- light bulbs going off over their heads--and conversations-- and people understanding each other for the first

> time. You know a lot of barriers were coming down because they started recognizing what their common ground was. And I think there is so much finger-pointing and blame going on in the education system that people forget to look for that common ground. But it is there so it was nice in our process that that came out. (Jen, Document P15:0085-0091)

The participant referred to the inspiration she felt, noting that it was "why a lot of us are really passionate about recreating that process over and over again--as many times as it takes for people to actually feel that empowerment" (Jen, Document P15:0219-0220). Properties of Category 6: Common ground are "common experience," "culture," and "trust."

a) Common experience

Common experience was identified as a motivation. One participant noted, "[Journalist A] accurately reports real events that we were not only involved in, but that we were so strongly affected by that we are STILL in the edu-advocacy soup." (Kate, Document P4:0260). Having common ground or common experience was identified as "making it more comfortable" or creating "trust."

> And I thought it raised morale a little bit--it sort of brought people together and when the dispute was sort of resolved it made just made it more comfortable for everyone to go back in. And to think that we kind of experienced this together. It wasn't a divisive event. (Louise, Document P29:0057-0059)

Another participant identified that journalists were more likely to cover their group if they shared parenting or schooling concerns.

> I would notice that different journalists had more of an interest. They had kids in school, they're pregnant, whatever--they seemed to be really interested in the story. (Tina, Document P6: 0234-0235)

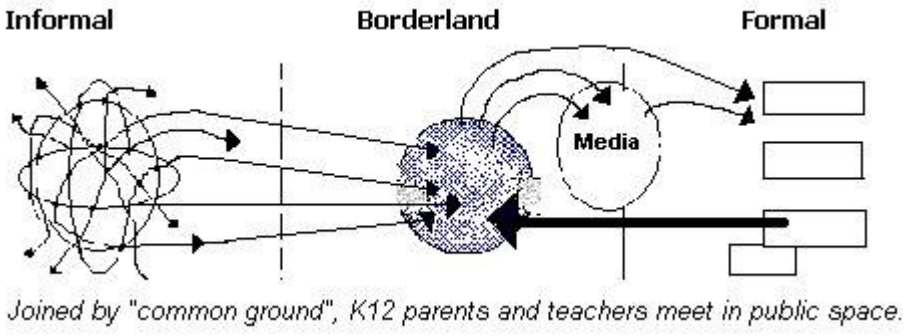
The following example illustrates how common ground can contribute to success in the borderland: a participant described the success of a small support rally at her school as "unusual" and attributed motivation to common ground--"they came for the same reason."

> They weren't the usual parents. I didn't see anyone from the formal group. It was totally informal. And really it was amazing at the range of people who decided to come out. People were saying "I've never worn a sign before!" I'VE

never worn a sign before. I've never walked a picket line in my life. I'm not a demonstration-person--I'm a quiet- sit-in-the-corner-and-write-letters-person. I don't like public displays of my feelings. But I did feel, a lot of us felt, this was the point that they had to do it. You know, people in their forties who've never demonstrated thought--You know, "What's going on? These are our children." There was that personal connection. There was a really diverse group of people that I don't normally see coming out together. They came for the same reason. It was kind of neat. People that maybe didn't feel they normally had a voice in some other things, you know, just came. (Louise, Document P29:0072-0082)

Figure 5 shows how advocates were able to be heard by collaboratively creating a public voice in the borderland.

Figure 5. Making a public voice



b) Culture

Another participant suggested that having a voice may be dependant on being of the same culture as the system.

> Culturally they don't always have that real strong connection with the school or don't feel they have the right to say anything or possibly are afraid to voice their opinion if they think it's not in line with what the authorities want them to think. (May, Document P12:0024-0027)

The formal public education system is culture-based. In the following example, a participant facilitates successful connection between K-12 parents and the formal school system by creating a more informal context.

> . . . most of our parents and students are immigrant, ESL and are not big advocates -- not like strong advocacy group -- not having big meetings. So I go to get the connection going on. Not big meetings but just talking so that

> teachers know the parents and the parents feel comfortable talking to teachers. And I found the way is not going to meetings but over food. (Laughs.) Yeah. In the past few years when we had the parent walk-about, we had dinner and parents came. And then I started 3 years ago with the staff appreciation lunch-- Oh parents love it. Big turn-out. (May, Document P12:0022-0028)

c) Trust

Advocates recognized the role of trust as a basis for interaction and communication. Trust was seen as a result of having common experience or common culture.

> You are not going to talk if you don't know who they are (May, Document P12:0258)

To reach parents in her community who don't speak English, one advocate relied on a trusted community member.

> And also there are some parents who really have the leadership skills, they just don't speak English. So I can call them. I have a Mrs. Lee in Strathcona and I can call her and say, Mrs. Lee, this is what I've done. Can you get it to parents?" She will go to the Chinese market, she will go everywhere. You can find some way. They don't have to speak English. She is in the community. People trust her. (May, Document P12: 0221-0227)

In asynchronous online communication, trust was especially important. Advocates thought that "knowing people" was a requirement for successful online communication, some stipulated that knowing people face-to-face was necessary.

> ...so that was probably my first community-based listserv. And it became a powerful device. But it was premised upon, first, a face-to-face organization, people knowing each other, our kids playing together, trust. (Daniel, Document P14:0295-0297)

> The danger of technology is that it can go to the hands of people and you never know who they are. You don't know them. I think that for advocacy, relationship and trust is more important than technology. More valuable. (May, Document P12:0244-0246)

Summary: Connecting to the Wider Network

This section has reported study results that addressed the research questions regarding how advocates did things together and with other groups. Advocates connected to people and groups to make a voice in order to represent their issue and the people supporting it.

Accuracy of voice depends on listening to people: voice is most effective if it speaks using simple language. Advocates needed to communicate with the formal group, but often found their informal system clashing with the formal system in a borderland -- a place of potential interaction and dialogue. Successful interaction was prevented by barriers and misinformation controlled through the formal system and the media. These caused frustration -- yet frustration motivated the advocates to further action. The examples of success appear to indicate that successful advocacy requires the following: a strategic move across the borderland; building credibility in the borderland; framing work in borderland language; and finding common ground or reaching a critical accumulation of connections across the borderland. For informal advocate groups, success in the borderland depended on overcoming barriers and making connections. For the formal education system, success in the borderland depended on relaxing barriers and making connections. For informal learners, the common ground of shared experience, collaboration and shared culture created trust and strengthened connections.

Technology Access

Results presented in this section apply to the following research questions: What technology is used? How did group members find out about it? How did group members get it? What ICT has helped most in group successes? The technology accessed and used by the advocates will be described in this section. However, this section will not discuss how advocates and groups used the technology in their advocacy work. The application of technology will be discussed in the Functions section that follows.

Although many participants reported using non-electronic technology such as fax and telephone, advocacy groups did most of their work using email, through websites, and using

word processing, file formatting programs, and writing and publishing tools. Email attachments, FTP and some editing software were used to collaborate. Advocates also used search tools, online forums, surveys, telephone calls, and teleconferencing, blogs, videos, online petitions, PowerPoint and, once, asynchronous online conferencing.

Table 3 shows the technology accessed by the advocacy groups. Both non-electronic and electronic technologies are included. Advocates used different tools in internal group work than they used in external group work, and not all groups used the same technology. Examples:

- Phone and phone conferences were used by 3 groups for internal work.
- Phone was not used for external work.
- Group 2 used face-to-face meetings for internal interaction, but an online forum for interaction with the wider network.
- Online search tools were used by four groups for internal work.
- Fax continued to be used by three groups for external one way information distribution.
- Websites were used by three groups for external one way information distribution.

However, email was used by all groups in both internal and external group work. The codes "email" and "website" occurred well over 100 times, while the next most frequent technology codes were document tools, mailing tools, and research tools with approximately 40 occurrences each.

Table 3. Technology Accessed by Advocacy Groups

Technology Accessed For Internal Use

	F2F meeting	***Fax***	***Email***	***Website***	***Online search***	***Online forum***	***Online petition***	***PowerPoint***	***Blog***	***Phone***	***Phone conference***	***Online conference***
Group 1	-	-	X	-	X	-	-	-	-	-	X	-
Group 2	X	-	X	X	X	-	-	-	-	-	-	X
Group 3	X	X	X	-	-	-	-	-	-	X	-	-
Group 4	-	-	X	-	X	-	-	-	-	-	-	-
Group 5	X	X	X	-	X	-	-	-	-	X	X	-

Technology Accessed For External Use

	F2F meeting	***Fax***	***Email***	***Website***	***Online search***	***Online forum***	***Online petition***	***PowerPoint***	***Blog***	***Phone***	***Phone conference***	***Online conference***
Group 1	-	X	X	X	-	-	-	X	-	-	-	-
Group 2	-	X	X	X	-	X	X	-	-	-	-	-
Group 3	-	X	X	-	-	-	-	-	-	-	-	-
Group 4	-	-	X	-	-	X	-	-	X	-	-	-
Group 5	X	-	X	X	-	-	-	X	-	-	-	-

Access to technology

The five groups of the study were urban-based--advocates accessed computers and Internet in their homes, in their workplace, at schools and at libraries. All core members of the groups had computers and Internet access in their homes (Barb, Document P8:0030: Document P9:0066; Louise, Document P7:0086; Daniel, Document P14:0338), although one participant preferred not to use that technology and defaulted to fax and telephone (Jen, Document P15:0163-01660). Figure 1 provides a photograph showing a typical home technology setting-- scattered between the monitor and the computer are colour swatches, a cell phone, a dog-eared business card, an open daybook, a half-full glass of beer, and children's stickers decorate the monitor frame (Document P33). Advocates also had access in their workplace (Barb, Document P9:0084; Daniel, Document P14:0107).

Results showed only 11 occurrences of having no access to computers or Internet: eight were among inner city users and three were among rural users. An inner city group participant reported members ". . . who don't have access to Internet. Not a lot, the ones who tend to be involved are able to access it" (Rhonda, Document P10:0056). Another participant reported: "I think that some of the advocates don't have access to email, they don't have computers in their homes. . . I'd say at least 20% in the inner city. A lot of parents I know use the computers at the Vancouver Public Library or at the schools when school's in session because they don't have them at home." (Barb, Document P8:0100-0113). The advocate commented she didn't think this access was "adequate" and that "it doesn't give them much of chance." Another participant reported

> Most parents might have access but whether they would use it …I think parents that are facing many of the problems of inner city parents may not take time to do that either. I know some people use the library -- you have to go in there and line up… We have some parents who don't have a computer that have email through library free Internet. There are some who get our information that way. (Rhonda, Document P10:0206-00210)

The technology provider participant described non-profit initiatives, such as Vancouver Community Network (VCN), meant to address community access (Raj, Document P11:0010-0011). Only one participant reported an awareness of these services (Jen, Document P15:01087-0108). However, the reported library use was likely the use of the branch library VCN stations that allow members of the public to use free VCN accounts to do email and search the Web.

For advocates in rural areas who faced barriers to access, results were reported that showed the following:

- no access (Dee, Document P2:0147);
- home satellite access at high cost (Daniel, Document P14:0018);
- no home access, but satellite access through a public building (Daniel, Document P14:0014-0016).

The main technology used for internal group work was email. Participants described widespread access to email as being fairly recent, both through the K-12 parent community

> Some didn't check it so much. It was a bit hit and miss. There was a feeling that there weren't enough people using it regularly. That was about six years ago. (Louise, Document P7:0204-0206).

and through the local school system.

> And then we started faxing to schools. Yes faxing. No email yet. Ten years ago there was no email to schools. We just started email 4 or 5 years ago. (May, Document P12:0131-0133)

One participant described email as replacing the telephone, ". . . 10 years ago we used phone and a phone tree for mass communications. Now we use email." (Barb, Document P8: 0040-0041).

Although all core group members had email access, additional methods had to be used to reach group members who did not have access to email. "We make sure that we try to phone those people or contact them though the school by fax." (Rhonda, Document P10:0058). One participant still reached her wider network by direct mail because "we also know there's a lot of people who don't use their email" (Jen, Document P15:0191-0192).

All groups used the email CC copy function or group mail functions for internal group work. To reach their wider network, email group mail technology, fax and post were used (Barb, Document P9:0070), (Rhonda, Document P10:0050). Mailing lists were organized according to purpose: communicating internally; communicating with the larger advocate network and with the K-12 parent community, and local schools, and communicating with media and government. The Provincial Network Group mailed to a membership list.

> We have a membership list of people who want to be a member of the organization and we have a list of people who just want to stay on top of what we are doing. (Jen, Document P15:0075-0076)

Mailing lists varied in size (May, Document P12:0149) and in scope, "We've also got international people on the email list -- people in several countries." (Tina, Document P6:0190-0120). Advocates reported mailing lists were maintained by one group member. "The email list is a list of 50 people. There is one person who handles the email list. She has the master email list and the master fax list" (Barb, Document P8: 0034-0035).

Results showed many barriers to access to email within the local K-12 school system. Barb had said the percentage of parents without Internet access was "... at least 20% in the inner city" (Barb, Document P8:0100). When asked if schools had ever done a survey about parent access to email, she replied, "Not to my knowledge. It's totally anecdotal." (Barb, Document P8:0113). A participant reached parents without email -- "The old-fashioned way. I just send a hard copy to their school." (May, Document P12:0209-0212).

Another participant reported there was a system, but that it was difficult to access:

> But I think that the PAC system-- the new PAC email -- it takes a few steps to be able to set up and you have to have a computer either in the library or in the office. And I'm not sure if every school or how many schools actually logged on to that and got going. 'Cause you have to have a fair amount of technology and a lot of inner city parents don't have that. They don't have the computers they can access. (Meg, Document P13:0174-0182)

When asked if the system could only be used or accessed from the school, Meg replied, "I think so. It's a school thing as far as I understand….Parents would just email when they were at the school. It was a thing for DPAC and PAC." (Meg, Document P13:0182-0185). Meg's group used fax in lieu of email to reach the K-12 parent community. Meg identified two problems: not being able to have direct parent-to-parent communication--"having the administrator pick up your email and present it at the PAC meeting sort of defeats the purpose" (Meg, Document P13:0196); and not knowing if the information was received. She hoped for an accessible email system:

> I think the vision was that parents would communicate with parents at that level. .. Then we could send notices of meetings to a PAC chair and use the function that shows that it was opened so at least we would know they read it -- that someone had seen it. (Meg, Document P13:0197-0199)

It appeared that the formal system of the local schools did not provide parents access to school communication technology and that advocates were limited to face-to-face meetings, fax, and telephone.

Three of the five groups had websites. Advocates recognized the value of websites to disburse information: “I knew that web-based technology was becoming THE thing.” (Jen, Document P15:0143-0148). Websites were made and maintained by a group member (Barb, Document P8:0042; Louise, Document P7:0204) or by volunteers (Jen, Document P15:0143-0148). One group reported using Dreamweaver to construct their website. (Barb, Document P8: 0044). Advocates used available software and did not hire professionals: “We have a website -- I think one of our members funds it -- we have no money” (Louise, Document P7:0204).

The Inner City Group did not have a website because “We don't have somebody to set that up” and “Our work is very local -- 18 schools in the district mostly” (Meg, Document P13:0213-0215). Another participant from this group said, “I don't think it would make a big difference in our case” (Rhonda, Document P10:185). However, their briefs were available on another advocacy group's website. The group also connected with the school website (May, Document P12:0067).

Advocates created many documents: research papers, surveys, backgrounders, press releases, position statements, newsletters, policy documents and book chapters. Regardless whether the end form was electronic or hard copy, documents were most often drafted over email. Some groups attached drafts in Word files, for example. As some groups used different operating systems, they found it easier to paste the document into the body of the email. For newsletters, publishing tools were used.

> Newsletter content is gathered over email and the layout is done in Word. The copy and editing is done by committee over email. The final newsletter is sent out to the listserv in PDF -- less likely to be edited. But not everybody uses Acrobat so we do Word too.
>
> Newsletters are archived on the website and are available for download. We send the newsletter to school PACs, now that there is finally a public list of school PAC emails.(Barb, Document P9:0076-0081)
>
> Fall PPG newsletter--Louise has distributed early draft of copy, Barb will drop it into template, everyone to check it over/add/delete/improve copy (Document P17:0024)

As well as using email attachments, one participant reported, "We also use FTP through our website to send big files" (Barb, Document P9:0123).

Advocates also used Internet search engines, notably Google, extensively. They researched "other organizations," people, media stories, papers, and government information (Tina, Document P6:0366; Louise, Document P7:0238; Barb, Document P9:0108-0109; Daniel, Document P14:0172-0173; Jen, Document P15:0122). The Seismic Safety Group had an international network and was the heaviest user of Internet tools. "From Louise, with her fabulous Google News Alert, I got stories from all over the world." (Tina, Document P6:0123). The Public Education Policy Group used the Internet ". . . to find addresses and find information. We use Google and check Hansard." (Barb, Document P8:0122). The Inner City Group did not use Internet search, calling it "more of a one person thing" (Rhonda, Document P10:0169) but did check in on websites for information (May, Document P13:0211-0212).

> You know what we would do is if the government makes some kind of announcement or something we'll go to the government website. We rely on a whole bunch of sources whether it's within the school or someone we know -- it's not just out of the air. (Rhonda, Document P10:0165-0167)

Advocates reported limited telephone use. "We rarely ever phone." (Tina, Document 6:0147) Telephoning was used to reach members who did not have email access (Rhonda, Document P10:0058). However, telephoning was sometimes used if

there was “a crucial issue” (Meg, Document P13:0107). Another participant remarked on the different weight of telephoning. “Email is easily deleted and forgotten about, whereas once you have spoken to someone it is more embedded in their mind, officially, and they're more likely to show up for the meetings.”(Barb, Document P8:0050-0053). One participant reported hastily organizing over a weekend, saying “I think I made over 150 phone calls that weekend, leaving messages and talking to people.” (Louise, Document P29:0027-0028). Two groups used teleconference to hold meetings if members were not able to meet face-to-face:

> We have used teleconference because we have a couple of board members that are from farther out -- we would use the teleconference when they couldn't come in to the Lower Mainland…(Jen, Document P15:0124-0126)

Two participants reported using a synchronous online conference for internal planning with limited success. “It was a Yahoo thing. It was a little bit shaky because not everyone was using the same operating system and not the same vintage system... People that hadn't used chat were pretty lost at first, then the op-sys problem killed it. It wasn't successful.” (Barb, Document P9:0088-0092) See also Fahrni (2004).

Of the two groups that did not have a website, one used a blog instead. The participant learned about blogs through his workplace.

> I ended up being directed to our e-learning thing on campus and they said, “Here, we'll give you a blog and you can do what you want.” And I said, “-- blog?” (Daniel, Document P14:0032-0033)

The participant had some concern regarding control: “I'm riding off the advantage of a major corporate institution for the weblog that I'm using. And I actually was worried a couple of times that I would see my weblog shut down. (Daniel, Document P14:0107-0109). He reported widespread use of blogs in the advocacy network:

> The guys in Comox were running an MSN blogspot. And there was another blogspot in Vancouver using blogspot.com. There was a student

> who was doing some sort of organizing and his was this Zana or something…. (Daniel, Document P14:0127-0130)

Other participants reported reading blogs (Barb, Document P1:0050), (Kate, Document P4:0202), (Louise, Document P7:0244). Tina identified blogs as more suitable for "complicated" issues and "debate" (Tina, Document P6:0383-0387).

Other Internet tools were used for working with other groups and with the public. One group had an online discussion forum. "There is a listserv. It's managed by a member who had access through his workplace so he could set it up and run it through there." (Louise, Document P7:0090-0091). The forum had "about a hundred people" (Daniel, Document P14:0189), was public and rarely moderated. Another group used to have a forum:

> And we did have a discussion forum but it wasn't being used very much and we decided to save some money in the meantime and we're now on Vancouver Community Net. It's free hosting so we don't actually have the space capacity for the discussion forum right now. (Jen, Document P15:0105-0108)

Two groups used surveying

> We are doing a survey using faxes to get school info after delivering hardcopies survey questions. We're putting the data in Survey Monkey. A member has access through work. They'd used it on other things at work. (Barb, Document P9:0083-0085)

and questionnaires (Meg, Document P13:0146-0147) to gather feedback. Another participant used an online petition (DS, Document P34:0022). Two groups had used PowerPoint software in presentations. The Provincial Network Group made a presentation using images from their provincial networking:

> I did a PP that basically represented what the journey was like, how we went around the province and what we heard. About 50 slides. It's like a little mini movie. Lots of pictures from around the province and also some text summarizing what we had heard and thanking the people for taking the time to share their wisdom with us. . . It's been used lots of times. (Jen, Document P15: 03650-0369)

Video clips from face-to-face events were used on websites and blogs (Daniel, Document P14:0265-02660). These Internet tools will be discussed further in the Functions section.

Discussion of results

Table 4 presents the category and its properties derived from the Technology Access results. It presents a continuation of Tables 2 and 3.

Table 4. Technology Access: Category and Properties

Category	Properties
7) Access	a) Available
	b) As needed

Category 7: Access

What eventually became clear in the study was that informal advocacy groups simply used technology that was available. No result showed that a survey of possible tools had been made or a certain tool selected. New technology was adopted as it was needed for the work of the group. The properties of the category therefore are "available" and "as needed."

a) Availability

Advocate core group members all had access to computers and Internet at home. Some also had access through the workplace. However, it was reported that some members without computers and Internet access, especially to email, were less likely to participate in the group.

It doesn't give them much of chance. (Barb, Document P8:0013)

> The ones who tend to be involved are able to access it. (Rhonda, Document P10:0056)

Lack of access was associated with poverty issues. Although some parents used computers at the library provided by a not-for-profit, community access group, there was little awareness of such services. Similarly, the few access opportunities provided in schools were little known and failed to meet these parents' access needs. The easy home and work access available to the core group contrasted sharply with the limited and difficult access of inner city parents coping with poverty issues. The participants from the Inner City Group accommodated these members by using home telephone, face-to-face meetings, and school group fax.

Other groups assumed email access for full participation. Email contact lists were developed and maintained by these informal groups. The schools limited parent communication to fax and face-to-face meetings -- any steps to provide email access to school parent groups had proven ineffective. Access to the main tools of advocacy groups requires Internet access, and although there are limited attempts by community and school groups to provide access, access remains an individual responsibility.

b) As needed

The property “as needed” is illustrated with three examples from the Seismic Safety Group. First, a participant described the critical need to have “something to go to look at” that motivated development of the group website:

> And then it was a big rush to have the website up for the anniversary of the collapse of the school in Italy. We founded June 03 and we wanted the website up October 03 because CBC phoned me and said come down and be on the news for 5 minutes. This was the first media of all -- 5 minutes! that hardly ever happens!--and I thought we have to have the website ready by then cause if I am going to be on the news… So we started building it a few weeks before that. We thought people should have something to go to look at from this news story. (Tina, Document P6:0179-0184)

In the second example, she equated a changing process need to a change in technology:

> I don't use any of these wikis or blogs (for my group). Everything is working -- everything is good. But now that I'm getting into the health care thing -- that's so much more complicated. You have to have a lot of debate to decide what people are thinking -- more of these kind of things will be useful. For the first time ever I am thinking about a blog ... (Tina, Document P6:0383-0387)

In another example, the participant describes having to develop a PowerPoint presentation.

> I used Power Point. My first PowerPoint was for the bloody United Nations ! I had never used Power Point--this nice low-pressure introduction -- go present at the UN! And it worked -- I love it. I've presented since. (Tina, Document P6:0357-0359)

The addition of new technology was responsive. The advocacy groups did not report setting up an office or gathering a range of technology of potential use. Advocates simply began their work and added technology to meet arising needs.

Summary: Technology Access

The informal groups used available technology in the home, at the workplace, and in the community in fairly basic ways. To participate fully in the groups, Internet access was required. The primary tool for advocacy work is email, and all but the group with the narrowest, most specific network (“Our work is very local” Meg, PD13: 0215) used online tools such as website, blog, forum, and petition to distribute group information externally. Although core group advocates had computers and reliable Internet access, barriers to access were reported for some inner city and rural advocates. A dysfunctional email contact system within the local school system frustrated advocates and hampered external communication. Groups did not plan technology acquisition, but accessed available technology as they needed it for their work.

Learning ICT

This section shows results that address the following questions: In the group, who uses the technology? How did group members learn to use it? How has ICT use changed since the group started? Results are based on 29 open codes (over 200 quotations) relating to "Learning ICT." Results show the following:

- advocates had various levels of prior experience or transferable skills;
- advocates learned to use technology on their own or with help from a colleague or family member, but not from formal training;
- advocates reported that learning ICT changed the way they did things.

Various Skill Levels

As noted earlier on Technology Access results, all core members used email extensively, but one group member was designated to handle the email lists. That member had more experience in that work and in some cases was more available or had a preference for that work. Results in this section show that that a similar "specialization by default" applied to publishing documents, website construction and media work. However, when working collaboratively, there was a fair amount of skill transfer (the code "sharing tech info" occurred 50 times), and technology work was increasingly shared. For example, one participant indicated members picked up email skills: "There may have been one or two people more new to it, but they caught on as they used it" (Barb, Document P9:0067-0068). The one participant who had no experience--"I had never even done anything on the computer before I started this -- no email no nothing," (Tina, Document P6:0137-0138) -- was the one who reported starting a blog, preparing a PowerPoint presentation for the UN, and lobbying distant people with Google News

Flash media stories from their locality before they had a chance to read them in their morning paper.

Some advocates had prior constructs that helped in learning new ICT. Daniel reported having taken "earlier computer courses" (Daniel, Document P14:0241) and attributed his ease in learning ICT to "lateral thinking."

> I always played around with this sort of stuff. I've never considered myself to be very efficient or effective but I've always played. And actually growing up on my father's fish boat, he always would buy the newest kind of gizmos. And it fell to me to try to set them up -- the GPS, or the LORAN, the new radio phone. Some of the time it's just lateral thinking" (Daniel, Document P14:0233-0237)

Jen reported how she developed a PowerPoint and CD:

> I found that PP was east to use because I had developed my own website -- formatting the stuff etc. I find that one technology sort of builds on another sort of thing. And I've now learned how to use Photoshop and other things. Not on an expert level. It's a matter of having the time. (Jen, Document P15:0385-0388)

Learning

The one technology provider participant described volunteer trainers through organizations such as Vancouver Community Net or Volunteer Vancouver (Raj, Document P11:0040-0042) and stated:

> I think there are a lot of organizations coming up that realize computer illiteracy is a real disadvantage in our society and I think there is actually more provision for training outside of formal systems than before. (Raj, Document P11:0144-0146)

However, no participants reported using such help in learning ICT. Results describe learning ICT by just "doing it" (11 occurrences), by oneself (9), by "playing around" (7), by "just seeing how other people used it" (4), or "from a manual" (1). Others learned "from colleagues" (6) or "from family" (3). ICT skills were not hoarded -- there were 50 occurrences of participants "sharing tech information" and 15 occurrences of "asking for

tech help." One participant reported help from "a couple of students from Cap College (who) volunteered as their course project."(Jen, Document P15:0147).

Advocates had connections across the wider network and brought in technology they thought would be useful to their group.

> Now the other group I'm working with has a website as well and one feature it has is auto-send letters that people could use if they wanted to write to their politicians or MLA. (Louise, Document P7:0221-0222)

Several participants applied skills they had picked up in their workplace, as reported here:

> The blog emerged around my teaching -- I asked the ITC guy and he said, "Well you can give me a CD and I'll get to it OR how about I give you a login and password and you can do it." I said, "No problem." So with a few questions here and there -- just rudimentary stuff, some easy code. It's fun. I played around with this thing. (Daniel, Document P14:0246-0251)

The learning was described as almost accidental. "I saw, much to my surprise, that people actually started using the comment function." (Daniel, Document P14:0151). One participant recalled how she learned to use email:

> Often just seeing how other people used it. I would receive an email that was sent from another group and I figured out I could "Reply all" -- sometimes accidentally -- really just through using it -- certainly no one ever really taught me or anything (Louise, Document P7:0070-0073).

A participant described her learning: "I just read it in a book. And had a little bit of one-on-one help. One person knew what they were doing and the rest of us just limped along." (Barb, Document P9:0047-0048). Another participant described applying prior knowledge and having "seen it used" as a method of learning ICT.

> Different software being similar so once you know one you can guess others. I was trying just to come up with something. I had played around with PP and seen PP used at other workshop so I sort of had an idea of how they flowed. So once I got in to the PP software and started flapping around with it I was like -- Oh I can do that -- and that… And so I used a whole lot of tricks that PP has to offer just by discovering them. I didn't know that I had that kind of creative thinking in my head 'cause I had never done anything like it before. (Jen, Document P15:0377-0383)

The sporadic nature of learning technology was indicated by this quotation that spans from “goose bumps” of excitement to a postponement of further development.

> It was one of those creative things -- I was getting goose bumps but I wasn't sure other people would like it. Everybody was like "Wow, that was awesome," -- it was my first PP! I've thought about putting it on the website but I don't know how to do that. When you're learning on the fly and developing things as you go…when I figure it out I will (Jen, Document P15:0372-0375).

Changing

The need for equitable access to learning ICT along with the observation that there were still many barriers to access was expressed: “If everyone learned how to use it -- if we come to a time when everyone can have that and have that support -- then that's a good idea. Later if it's affordable and easy, then it would be good.” (May, Document P12:0264-0266).

One participant described her learning.

> Personally, 8 years ago I was not computer literate. I've learned a lot, just because when you're writing letters or briefs or having to do attachments -- I didn't know what an attachment was or a BCC and I'm sure that's true of many of us. Partly because of the group because of communicating and doing things to make things easier -- I may have been doing that in any case. But it's really helped -- all this writing and sending. (Rhonda, Document P10:0213-0218)

Advocates also reported learning ICT had changed the way their group worked and identified efficiencies in organizing meetings and drafting letters.

> It's more efficient. We get more work done without having to do the f2f with the core group. Fewer f2f housekeeping meetings are necessary to get the work done. The big group meetings which we do with other orgs, and at the schools, we want the f2f and those meetings are still the same. Technology has made it easier to get more turnout. (Barb, Document P8:0137-0140)

> I think the email thing started to work especially for drafting letters. I did see this year the phone-out used just once. I don't think they use the phone out often because it's time consuming and also because they don't want to phone out for every little thing--they want to save it for the big stuff. We

do continue to use the fax to every PAC chair and we do continue to email amongst ourselves. (Meg, Document P13:0166-0172)

Discussion of results

The categories and properties derived from the "Learning ICT" results is presented in Table 5, as a continuation of previous tables.

Table 5. Learning ICT: Categories and Properties

Category	Properties
8) Play	a) Experiment
	b) Pleasure
9) Collaboration	a) Open
	b) Community

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Category 8: Play

"Play" describes much of the learning done in informal groups. Results did not refer to formal training and there was only one reference to even using a manual. Advocates learned "on the fly" in the normal course of their advocacy work and described their learning in informal terms. The properties of Category 8: Play are "experiment" and "pleasure."

a) Experiment

Experimentation with technology occurred while advocates were focused on their work, with statements such as:

- I just learned as I went;
- I was trying just to come up with something;

- It was just by discovering them;
- It was kind of accidental;
- It just kind of evolved.

Advocates learning ICT appeared to spend time experimenting with technology. The verbs used to describe this process were playful in nature, such as:

- I just fiddled around;
- I kind of played around;
- I fooled around with this thing;
- I started flapping around.

b) Pleasure

Learning ICT positively affected self-image. Advocates reported increased confidence as well as pleasure as they learned and used new technologies in their advocacy work. Statements such as the following are indicative of this characteristic:

- And now she's a lot more confident;
- I was like -- Oh ! I can do that -- and that…;
- It was one of those creative things -- I was getting goose bumps;
- I didn't know that I had that kind of creative thinking in my head ‘cause I had never done anything like it before;
- It's fun!
- And it worked -- I love it!

Category 9: Collaboration

As well as “just playing around” on their own, advocates learned from the people around them -- their colleagues, their friends and family. Together, they “figured it out”

and “learned hands on.” ICT knowledge and resources were willingly shared and advocates were comfortable asking for help from each other. The properties of Category 9: Collaboration are “open” and “community.”

a) Open

Advocates willingly shared individual knowledge and resources. Subject to the level of time and energy of its members, the informal group benefited if more people could do more things. Although there was some “specialization by default,” new technology was simply brought in by a member who thought it may be useful and other members learned by using it in the course of their work. Statements included the following:

- One person brought that and we used it and some people picked it up faster than others.
- They caught on as they used it.

Advocates learned new technology if they believed it would benefit the group. One participant said she learned “because of the group--because of communicating and doing things to make things easier.” The acceptance of “doing things to make things easier” to do the work of the group led to an open climate -- advocates were comfortable bringing experience into the group, sharing knowledge and skills, and asking each other for help. This was true in the wider network as well. By communicating with other groups, advocates became aware of and shared useful technologies.

b) Community

Collaborative ICT learning reflected community. Many advocates reported learning ICT from an existing network of family, friends and colleagues -- adding another aspect

to the scope of those relationships. In some cases, more connections were created as learning needs brought a member's family or friends into the group. The sharing of skills among group members and the wider network occurred mainly online and resulted in a large, loose network that acted as a learning resource for advocates.

Summary: Learning ICT

This section addressed questions about how advocates learned to use ICT. For many advocates, learning was like play -- occurring naturally in the course of their work and giving them pleasure. Advocates learned both through experimenting with new technology on their own and through collaboration. Advocates brought prior experience or transferable skills into the groups, and openly shared skills and resources. Friends, family, colleagues, and connections from other groups formed a wide, loose network of learning that was largely online. Some reported that participation in their group changed their skill level, and that ICT use changed the way they did things in their group. Participants came together to advocate, but informal learning was a function of their participation in the group. One participant questioned the need for formal technology training: “Yeah in K-12 you always hear "Oh technology classes" and I think -- you guys don't get it-- do you teach anyone how to use a telephone?”(Daniel, Document P14:0342-0343).

Functions of ICT in Informal Advocacy Groups

This section focuses on the functions served by technology and addresses the following research questions: How did advocates use technology to do what they do? What function did ICT play in group internal and external processes? How was feedback

obtained? How did group members know their processes are working? The many descriptive codes used the gerund form to represent what the advocates were doing: reporting, forwarding information, editing, and so forth. Codes covered more than 1900 occurrences of 39 functions performed by participants in the following areas of advocacy work:

- Strategizing -- deciding what to do and how to do it (700+ occurrences);
- Preparing to act (700+ occurrences);
- Acting (200+ occurrences).

Some functions pertained to an area concerned with the well-being and sustainability of the groups--the energy and motivation of group members and the focus and credibility of the groups themselves. This fourth area was termed “Group care” (250+ occurrences). The presentation of functions results is organized under the four areas. However, the areas are neither exclusive nor sequential -- functions occurred in or across several areas. Functions are related to the technology listed in Table 3.

In addition, a fifth subsection, Analysis of Email Use by an Informal Advocacy Group, is included. As email was the technology most used by informal advocacy groups in all areas of their work, an analysis of email usage and function frequency of one group's core group emails over a three-month period is provided to give a detailed snapshot of how informal groups use email. Results are then discussed according to categories and their properties. Finally, the discussion of the functions of ICT is summarized.

Strategizing

Informal advocacy groups are organized to address a problem. In deciding how to address the problem, advocates reported functions that followed various modes: first a wide, receptive mode of getting feedback through connections, scanning the wider network for new developments, and actively listening to the network; then a discussion mode of dialogue around new issues and developments; and finally a focusing mode of clearly defining changes and deciding actions.

The receptive mode includes the functions of connecting with the wider network, forwarding and reporting information, and talking to people and asking for feedback. Email, online search, website, and face-to-face meetings were used for connecting to the wider network and reporting feedback.

> We all look at different things and bring things to the meetings. Different bits of information and statistics. Sometimes we go through VSB or other educational things to bring information -- especially precedents of what's going on in other areas -- there's some bits and pieces of stuff from America -- research and educational stuff. There was a lot of community school info that came up that we used in our draft letters. We found the information through the Internet through connections like the community schools site or other website links. Sometimes we share stuff with similar groups. (Meg, Document P13:0206-0212)

> I provide articles that may be of interest to the group or there may be something people may want to respond to. If it's in a newspaper that is relevant to the work we do, I know lots of people in the group don't have time to read every newspaper or some don't get it so it's just a way of sharing information. Often I have a comment on it or a question on it to find out if someone knows more about it, or if people want to respond, or if it's an issue that I'm curious about -- sometimes it strikes a chord but I'm not quite sure what it is -- it's interesting just to put it up to see other people's responses. (Louise, Document P7:0098-0103)

Advocates made new connections and shared them with other groups.

> I'm very intrigued at her contacting you. I think a meeting could be beneficial, at least to hear what she wants to discuss. (Barb, Document P1:0177-0179)

> Interestingly, it's been me up here that has had to connect him with his own community down there because that I got to know all these different engineers -- I know all of them now. (Tina, Document P6: 0311-0313)

Feedback from the K-12 parent community was reported.

> . . . so we'll hear what's going on at each school and when we meet as a group someone will bring something up and we might go back to our schools if there's an issue. It's kind of a word-of-mouth. (Rhonda, Document P10:0083-0085)

> . . . by talking with a few other parents that I would run into in my daily activities, there seemed to be a sense among people that they wanted to do more, more of a public thing, sort of taking a stand (Louise, Document P29:0014-0017)

Email was heavily used for copying, forwarding and reporting information. Direct links to reference information were embedded in the email.

> I've just read G's posting in which she selects statements from the BCCPAC statement and comments (LINK TO POSTING) sometimes with personal feeling and sometimes with facts from AGM info. (Kate, Document P4:1037-1038)

> They're taking submissions until Oct. 23 http://www.leg.bc.ca/budgetconsultations/. We should get on this one. (Louise, Document P5:1332)

Advocates checked formal body websites and archives such as Hansard to monitor developments.

> We basically use Hansard to find out, for example, when there were announcements made of inner city funding, or on Community Link funding, to find out what the debate was, what the announcement was case it doesn't always make it to the papers. So we just want to go ahead and find out exactly what's coming up and what's been said. (Barb, Document P8:0122-0128)

Functions of the discussion mode were mostly internal group functions and included raising new issues, researching, forwarding, reporting, talking, meeting face-to-face, and reflecting. Participants used the group email function, copied all emails to all the core group, and used “Reply all” to respond. The use of email to discuss arising issues reduced the need for face-to-face meetings.

> Internally we use CC so that everybody sees that all have the same info. (Meg, Document P13:0203)

> So there's probably 20 who I would say, "OK we're thinking of doing this do you want to have input?" And then whoever seems to be not too busy and seems to be interested and responds then becomes copied on the next email as part of the working group. (Tina, Document P6:0165-0167)

One participant reported accommodating a member who did not use email.

> At the beginning, one member wasn't keen on email. . . Anything that we did discuss by email, we would end up faxing him. And he would fax back -- I'd transcribe it. Now, our board uses email a lot. For communication in between meetings. We have a group email for the board. And we pretty much always use it. (Jen, Document P15:0162-0179)

Online search was used to research information for group documents as well as for getting information on other groups or keeping up with developments in the problem area.

> Quite often if I hear a name of somebody on an issue I'll Google them to find out what organizations they may be connected with -- background information. (Barb, Document P9:0109-0110)

> I don't know what words she keys in but we get anything about a school seismic issue from anywhere in the world -- I get stuff from Cypress, from anywhere. I email stuff to my friends in California who get the LA Times and they say "I haven't even stepped out my front door yet to get my paper and you're sending me something out of the LATimes." (Tina, Document P6:0289-0292)

One participant reported frustration using online search tools:

> After the blog thing came up, I went and did a lot of searching looking for different blogs which I hadn't done before. And I was quite honestly horrified. So much of it is just a bunch of garbage -- my personal opinion… So that's the sort of thing that makes organizing hit the ground. Because then you're looking for a pin in a haystack. How do you find anything? So I was able, through really purposeful searching, dredge up half a dozen useful links. Daniel, Document P14:0166-0172)

Another described a critical use of online search:

> There's a lot of stuff that I read that I think "Wow that was interesting- I didn't know they were doing that in New York or Texas or whatever and that's relevant 'cause I see a trend that we're heading that way and maybe

> we should be aware of this." So it's sort of an informal education as well. (Louise, Document P7:0104-0106)

The focusing mode functions--clarifying, deciding, agreeing, discouraging, researching, asking for feedback--took place within the group. These are also related to defining group roles and defining group identity. Advocates were aware of the need for agreement on group positions before taking action:

> Fay raised a good question. We should toss it around to determine our collective opinion. (Louise, Document P5:1635-1636)
>
> We agree by consensus that it's something we want to address. (Rhonda, Document P10:0095)

At this stage, advocates influenced group direction, encouraging or discouraging suggestions.

> I don't think it will hurt to wait . . . I have seldom regretted holding off and reconsidering...while I have regretted not doing so. (Louise, Document P5:2028-2030)

Preparing to act

In preparing to act, advocates drafted group documents of many kinds and organized meetings and events. Intense internal communication was required. Participants described this: “Communication can be challenging at times, getting organized, getting people mobilized, finding resources, even just deciding on strategy when people have busy lives.” (Louise, Document P7:0035-0036)

Drafting core group research documents, submissions and briefs, letters and statements was a main occupation of preparing to act.

> Well, there are three key things in effective lobbying: the information, the information, the information. You have to have bullet-proof facts. Put together a research document that lays out the problem, that makes condemning comparisons to other jurisdictions and lays out the solutions because the government isn't going to figure it out. (Tina, Document P6:0014-0017)

Group documents were useful in grounding group actions:

> Sounds good, Fay. I'm glad we were pre-prepared as it were, with our statement. Lots of news coverage this morning in the Sun. I personally am glad to have the statement, as I have been fielding calls from various media.(Barb, Document P1:0856-0857)

Documents were drafted collaboratively, using email.

> We agree by consensus that it's something we want to address. Usually we say "Who wants to write that letter?" Um and usually 2 or 3 people will volunteer to look at it. And if it's a letter someone will write it or 2 or 3 people will write it and then send it to the group saying "Here's what we've come up with -- please send in your comments." We'll change it based on feedback rather than have one person do it. We really try to do it with a lot of people. Individuals would never write a letter on their own and send it under the group's name. (Rhonda, Document P10:0095-0101)

> Someone would have an idea. For example, recently I thought we should make a submission to the school board. So I tossed out the idea in an email first, should we do one, I'm happy to do it.(My feeling for all these groups is if you have an idea you'll be asked to do all the work.) Then you make sure every one else is in agreement, they think it's a good idea and they're OK with it: you proceed. Of course anything that goes out on behalf of the group should be approved and viewed by the group beforehand -- and that happens. (Louise, Document P7:0146-0151)

Participants regularly asked for feedback when submitting a draft by email:

> Please feel free to make additions, revisions etc. (Louise, Document P5:1028)

> Please double check the attached files. (Barb, Document P1: 043)

> Slightly tweaked. OK all? If I don't hear otherwise, I will post this early tomorrow morning. (Kate, Document 4:0925)

> Thoughts? (Louise, Document P5: 0665; 1628; 2146; 1134)

Editing comments were offered.

> FEEDBACK:
> 1. Need page numbers (don't appear when I open in my MSWord)
> 2. Still think you need to use heading . . .
> 3. IMPORTANT Note that email contact is incorrect. . .
> (Kate, Document P4:0293-0297)

> Looks great. Thanks for taking this on. I've made some suggestions-- additions in brackets, deletions underlined. (Louise, Document P5:2053)

Online, collaborative drafting was efficient. In one report, the working group was alerted to monitor their email and the draft was produced quickly.

> The draft goes up by email, then everybody is given 72 hours to add or delete from it. It's a fairly fast time frame -- it's not over weeks or months. (Meg, Document P13:0039-0040)

Email was also used to organize meetings and plan presentations.

> Usually emails are copied to all five directors. There would be the occasional conversation that might just involve two or three people on a specific issue. But generally planning a meeting everyone would be on it. People would say we need to meet, and who's available, when are you available and these dates work and then someone would reply I can't do it and it goes back and forth but generally it works fairly well. (Jen, Document P15:0040-0044)

> I have to take my kid to a soccer practice at 5 so I doubt I'll be very early. Can we sort of wing it? I can do intro (why we're responding etc.) and you could comment on our main recommendations, then we could take questions, discuss etc.? (Louise, Document P5:2159)

Advocates had little free time as evidenced by comments such as the following:

> As long as I'm back by 10 to pick up the girl. (Barb, Document P1:1149)

> Sorry for the delay. I'm juggling many projects at the moment. (Louise, Document P5:1243)

In the group emails, participants acknowledged a query or task, even if they did not have time to respond fully. They transferred their awareness of time constraints to the design of advocacy tools.

> Yes--if you think of it from the POV of a parent who goes to our website, you just want a quick and easy tool to grab on the way to meeting. (Kate, Document P4:0576)

One participant contrasted a quick, late-night email check with “running around with photocopies to people and finding it really time-consuming” (Louise, Document P7:0078). Advocates repeatedly expressed time pressure: “If you could clone us, the one clone could go to our jobs and the others could work on issues.” (Barb, Document P9:0126-0127). Email was perceived to be a time-saving technology:

> To me, that's what email has done for us. It's enabled something that wouldn't have been able to happen without it. Without email I don't think I would have been involved with any of these things -- it would have been

> impossible. The fact you already have it set up in your house -- it's basically free to carry on using it.(Louise, Document P7:0205-0207)

Acting

In contrast to the intense, internal work of preparing to act, the acting function turned outward to the wider network, the media, and the public. Main functions were raising awareness, representing, presenting face-to-face, and lobbying government. As one participant reported, “There was a whole lot of education that went on to make people realize that the issue was an important one.”(Tina, Document P6:0022) Some face-to-face actions were carried out, but most actions relied on Internet tools. Face-to-face actions were largely planned and publicized through email, mailing lists, website, blogs, and forums.

Group information was distributed through mailing lists.

> We also will notify people of anything interesting. For example at election time, we'll say; There's an all-candidates meeting coming up. Here's where it is. Here're some questions or topics you might want to think about. (Rhonda, Document P10:0234-0236)

> Well, our email list is about 300. We've got the Tri-cities area and she fans out to her whole email list and we've got Victoria and a few of those people have enormous fan-out. (Tina, Document 6: 0105)

The group documents, prepared for these purposes, were sent out via mailing lists to the wider network and media, and by email to formal recipients -- copied to partners.

Advocates reported differences between sending letters by post or email:

> Well, email will always get you an automated response and then sometimes a more thoughtful follow-up. A written letter will always get you a written response. Or at least that's our experience. (Barb, Document P8: 0068)

> I had always believed the opposite that handwritten personally sent letters had more impact but lately I have heard from people in that business is that emails are in some ways more effective because they get forwarded. One piece of paper that comes in gets stuck in a binder -- no one sees it. . . (Louise, Document P7: 0232-0235)

Some groups enabled letter-writing from their website.

> One feature it has is auto-send letters that people could use if they wanted to write to their politicians or MLA. We had them set up so that if they wanted to write to their MLA they could just click on their MLA and a letter would go and it would show as coming from their email address. I don't know how effective it is but it's certainly easy. (Louise, Document P7:0222-0224)

Group documents such as minutes (May, Document P12:6364), newsletters (Barb, Document P9:0080) and press releases (Tina, Document P6:0232) were posted and archived on the group websites. The website was a main tool for storing and distributing information. Advocates referred people to the website and included the website address on all materials.

> We hope the public accesses the website -- we have information, we have links, we have anything we have ever released on that site. We have information about who we are and how to contact us. When I'm talking to people or trying to explain something to them I can say, “Here's our website” 'cause they are trying to figure out who is this person and what's she about. The website contains our guiding principles and our policy positions so it does give people a nice way to see what we're about. (Louise, Document P7:0210-0214)

Advocates could be contacted through the website

> We get email via the website. There are emails on the PPG domain that forward to directors. (Barb, Document P9:0105)

and the websites were linked to each other and to further information.

> We share stuff through email and through website links. We each have other's links. We ask permission by email and keep permissions on file. (Barb, Document P9:0115)

Online forums were also used for raising awareness (Louise, Document P7:0089) and for distributing information. A participant described that using a tool that sent messages to members' email accounts was not intrusive.

> And the nice thing about doing it that way is that I don't feel bad about bombarding people with stuff cause it's so easy just to delete it. And people will say "I didn't have time to read it I just deleted those" or "I read them and some were interesting" so people have the option. I've talked to other

> people on the listserv who have their stuff going directly into a mailbox and then if they have time they can read them all. (Louise, Document P7:0107-0110)

One participant participated actively in a forum, which he described as "This interchange through which thoughts, ideas and information flow, inspires and prods us all to action" (NH, Document 34:0118). Another participated passively: "Like with the discussion group -- I read it, but those people are so professional. I think people are reading it but they don't want to put their name there." (May, Document P12:0242-0243). One participant described how the forum changed over time -- a comment on the weakness of an unmoderated forum.

> One thing I don't like about email, especially listed or threaded email, is that it's so linear. Not only that, email tends to be the chatty kind. (The forum) has really moved to a kind of distribution of information with the occasional discussion as issues emerge. Some issues are really local, but people are still checking in from the province. (Daniel, Document P12:0254-0258)
>
> The forum is available to the public. Anyone can sign onto it. It's not really moderated. Just somewhat moderated by members. It's constantly changing, people sign on and off all the time." (Louise, Document P7: 0056-0060).

The informal group member administered the forum,

> I always remove names after they bounce back. After a certain time. I let them bounce a couple of times and then I delete them. When I find I have people who are way off track I take them off. I try to keep as hands-off a role as possible. (Daniel, Document P14:0191-0194)

but did not moderate it. Participants reported moderating would take time.

> Discussions forums I find tend to require a lot more time and we would have to have funding to pay a good moderator, or find someone who doesn't need to work and would take it on. (Barb, Document P9:0119)
>
> Normally, on a smaller website it would be the person doing the website who handles the moderating. The amount of time that takes would depend on how many postings there are. (Raj, Document P11:0101-0106)

The forum administrator reminded members that the online communication was not private.

> I say that every now and again to people. I say "Think of it as a postcard on a public bulletin board. . .” I'm always surprised that people think email is a private medium -- like it's a conversation. And it's not. It's up on the bulletin board -- it's pegged up there -- it's in bold letters, too. (Daniel, Document P14:0155-0161)

Another participant reported discontinuing a forum.

> And we did have a discussion forum but it wasn't being used very much and we decided to save some money in the meantime and we're now on Vancouver Community Net. It's free hosting so we don't actually have the space capacity for the discussion forum right now. (Jen, Document P15:0105-0109)

Needing a public place for members to read and sign on to a letter, one advocate put the letter on a blog -- a blog that grew into a popular education information centre. “Now I was completely surprised by the blog -- it just happened -- the historical moment, the vectors merge, and things just work.” (Daniel, Document P14:0270-0271). He referred to the blog as “virtual ephemera although they can be searched for data later: they can be sources” and as “replacements of the leaflet that you hand out at the demo” (Daniel, Document P12:0259-0261). Continuing the metaphor, he described his use of a blog.

> I used it to collect emails and coordinate meetings and for support activities. I've used that technique and it's become an extension of a door-knocking approach. It's virtual door-knocking. Sometimes it's cold calling. And information distribution. (Daniel, Document P14:0314-0316)

Participants discussed the requirements of using online tools. Two participants commented on the requirement to keep the online tool up-to-date.

> There's no point in putting up a website and just letting it be. You have to constantly be updating it with the latest information. There are numerous websites up there just sitting there with a news flash saying "Here's the latest news" and the latest news is from 3 years ago. Looks bad. (Raj, Document P11:0108-0111)

> What I found interesting in terms of the flow of news and stuff was that none of those sites were actually doing renewing or update. Like all the OpEd stuff was really behind -- like a week to two weeks. The news had its own particular cast. (Daniel, Document P14:0203-0205)

Advocates evaluated the use of their website through available tracking tools.

> I used to track that every week -- I loved to see the stats of who was visiting -- we had people from all over the world. And actually, using those stats was really effective in helping us know when we were getting the word out -- come to think of it. (Jen, Document P15:0354-0359).

On tracking website effectiveness, one participant noted the following:

> You can just ask people. You get a statistic when someone contacts you -- you can ask how did you find us, did you see our website. Another option is that most web servers have statistics to view. So you can see how many times a person has visited your site. You can see where people are visiting from. Sometimes you can go as detailed as to what organizations are visiting your website -- so you can gather quite a bit of information to see how effective your website is. (Raj, Document P11: 0011-0015).

Advocates noted the speed of information exchange using online tools. The following examples describe the speed of researching information, launching an online petition, and distributing a model of successful action. In the first example, a participant describes retrieving critical information for a traveling member within 15 minutes.

> Yesterday I got an email from T in Montreal. She was somewhere that had limited email access and couldn't get to her lists. Something big was happening with the UN's recommendations on schools seismic safety and she wanted a bunch of media addresses emailed so she could just do a quick blitz so she could let people know what was happening. So I was Googling around trying to find different people at the Globe and the Post and MacLean's and the Sun and Province and I was able to do that within 15 minutes and get it back to her just using Google. So it's great for that. (Louise, Document P7:0247-0252)

The second interchange describes how the success of a local action spread, via email, websites, blogs, media, and word of mouth--"like wildfire."

> I came home and a few hours later I had an email from a parent saying, "We want to do that at our school -- what did you do to get things going?" I said, "It was really simple" and just told her what we did. . . So it was really cool. It was like a little wildfire spreading under the ground. Which also coincided with the publication of a survey showing high numbers of public support for teachers. Which I don't think the government expected. So it was neat that way--it did get a little bit of coverage that way. And on weblogs. You know, "This is what one group did." People just started connecting through the Internet. Really the Internet was the main link. And

the media. For sharing ideas at a really grassroots level. On the fly. (Louise, Document P29: 0108-0117)

The last example chronicles an online petition (regarding Education Ministry plans to stop issuing school completion certificates for students with special needs who meet their Individual Education Plan goals), showing its power to distribute information about the issue, raise awareness and spark dialogue. Within two weeks, government dropped the proposed legislation.

Online Petition Chronicle

----- Original Message -----

16/02/2006 7:55 AM From: DS. To: Moms on the Move. Subject: Online petition re School Completion Certificates-PASS THIS ON!

16/02/2006 08:09 AM Dear All, I've also posted a link to the petition at BLOG ADDRESS for ease of finding the address. It is currently the top entry. CM.

16/02/2006 08:12 AM While I support the sentiment of the petition, I'm afraid that on-line petitions are frankly "not worth the paper they are written on." (Bad joke I know but a true statement nonetheless.)

Surely in a group as savvy as this we can come up with a better plan of protest. Our letters don't seem to have a lot of impact but they do a good job of registering displeasure. OA.

16/02/2006 08:15 AM True enough, though if there is sufficient numbers signing up it results in news coverage -witness the student petition against the portfolios- news coverage in an d of itself doesn't cause things to happen, but the combined weight of such activities adds up and can provide significant social pressures which might actually lead to something. CM.

16/02/2006 08:22 AM Signing online, writing letters and any better ideas that people can come up with are more than welcome. There is no ownership of this issue, so if anyone has a good idea, by all means, take it and run with it, with our sincere appreciation. DS.

16/02/2006 08:28 AM I recall a wise woman saying at a conference I attended that effective advocacy often works like drops of water falling on a stone. It might take a lot of drops, but it will eventually leave a mark.

I agree that a petition alone might not be enough, but I see it as one component of our collective and ongoing advocacy efforts.

When people tell me that letter writing etc. doesn't effect change, I remind them of the very "concrete" (quite literally!) progress of the Seismic Safety campaign (although that work will be ongoing until the last at-risk school is done!).PB.

16/02/2006 09:33 AM RESEARCHER NOTES: Confirmation received by researcher: “Your signature number for this petition is 17.”

16/02/2006 09:55 AM By the way -- this is just building on advocacy efforts already launched by the Simon Fraser Society for Community Living (which issued a position paper) and BCASE, the association that represents special education administrators (who first raised the issue in a letter to the Minister) and LDA BC--Tri Cities, which has enlisted support of various key groups including the Coalition for Special Education and the Special Ed Partners Working Group. Thanks for the support everyone! DS.

16/02/2006 09:56 AM Hi: allow me to join the discussion on the efficacy of online petitions. Based on three years experience as a school trustee and two years of work with the NO CUTS TO KIDS COALITION, I can assure you that every form of advocacy counts, no matter what shape or form it takes! This includes letters to the editor, letters to MLA's, trustees, senior school board officials, telephone calls, emails, online petitions, informal meetings, briefs to school boards and the provincial government, discussion groups, and good old fashioned paper petitions.

The secret is not to give up, and to maintain unrelenting pressure -- even if it is just one person or just a few people; remember Margaret Mead's famous lines about the power of the work of just a few individuals.

This interchange through which thoughts, ideas and information flow, inspires and prods us all to action. Grass roots advocacy is a very powerful tool and it is a bright star to which we can all hitch our wagons. NH.

16/02/2006 11:33 AM RESEARCHER NOTES: Memo -- all parties respond to my query giving permission to use.

17/02/2006 09:33 AM RESEARCHER NOTES: Follow-up on online petition 26 hours after original email: The number of signatures was 224, with postal codes indicating province-wide distribution. At minimum, 224 people had read about the issue and committed to sign.

If it is assumed that signers passed it on, that some read about the issue but didn't sign, that letters/comments went to MLAs, Ministry, that discussion was generated in homes, schools, PACs, then regardless of its formal weight, the online petition was an efficient tool for raising awareness.

23/02/06 From HANSARD H046/pml/1455

J. Horgan: I have the privilege to present a petition. This petition was signed by over 1,500 British Columbians . . .

01/03/06

For Immediate Release
Ministry of Education
2006EDU0016-000141
March 1, 2006
PROVINCE TO CONTINUE ISSUING COMPLETION CERTIFICATES
VICTORIA - The Province will continue issuing school completion certificates for students with special needs. . .

(Excerpts copied from online forum with permission.)

Group care

This function area includes the following codes: encouraging, discouraging, reiterating identity, using humour, sympathizing, and expressing frustration. These functions affected the energy and motivation of group members. Another function that affected the well-being and sustainability of the groups was getting feedback: How did they know their processes were working?

Advocates encouraged other members for their efforts. (Note the high frequency of the code “encouraging” in Table 6. Analysis of Email Use: Functions and reference to technology.)

> Clap! Clap! Clap! Clap! Clap! Clap! Clap! (Barb, Document P1:0937)
>
> Good interview, Fay--thanks for expressing the survey work so well. (Kate, Document P4:0468)
>
> This is so wonderful to see this thing finally get to this point. You guys have done an amazing job. (Louise, Document P5:0795)

Advocates acknowledged frustrations and worked out group processes to avoid problems. In the following example, a participant addressed group consensus on publishing:

> I agree we need to iron out our procedures for stuff we publish. To be honest, the whole thing can be a little frustrating. The best case scenario is that we could meet regularly and ensure everyone is OK with what's going out, but I doubt that's really practical and some things (especially letters to the editor in response to stuff just published) need to go out quickly. The second best case is that we all read our email, think it through, and respond promptly, especially if we have concerns. This should get easier now that we're all back from holidays etc. (Louise, Document P5:0654-0666)

The groups tried to accommodate the different approaches of group members.

> Some of us have wanted to focus more on the research end of it figuring out how we can change the system and some of us have wanted to focus more on the community dialogue aspect of it. (Jen, Document P15:0054-0056)

Advocates also demonstrated a concern for ethical behaviour: data showed a concern for people's privacy (Kate, Document P4:0319), for ensuring permission to quote people (Barb, Document P1:0149) or use materials (Louise, Document P5:1257), and for thanking supporters (Dee, Document P2:0255). In communication, participants frequently reflected: “I've been mulling over our message . . .” (Louise, Document P5:0508); “Thinking about it, I thought that if . . .” (Kate, Document P4:0945). Participants used humour--- ‘Maybe they are pod people” (Barb, Document P1:0123) and a relaxed tone, creating a comfortable working climate.

Interview questions included questions on evaluation and feedback: How do you know people have heard you? How do you get feedback on what you are doing? How do

you know your processes are working? One participant interpreted “funding coming back” as evidence their processes were working and felt the group had had some influence on government funding decisions. “I think we are heard I don't know if we're always listened to. . . But if they think we are influencing or representing a larger group they start to get a little worried about it.” (Louise, Document P7: 0173-0174). Another felt government’s “doing stuff” was a satisfactory result, and expressed the ongoing role of her group to monitor commitments to implementation.

> In terms of the government actually doing stuff -- well, they are doing stuff. It's made all the commitments -- it's said it's going to do all these things so now we just have to make sure it does it. (Tina, Document P6: 0273-0274)

Others counted face-to-face feedback and group name recognition as markers of effective processes.

> People come up and tell you face-to-face -- comment about what you are doing, positive and negative. (Barb, Document P9: 0103-0104)
>
> I think we know because we're recognized -- people recognize when you say our name -- a lot of people recognize us, a lot of people from outside the school system, so they're aware of the group. A lot of the local MLAs are aware. I think just the fact that -- people know that we're out there that we're sort of monitoring things. (Rhonda, Document P10:0125-0128)

Recognition included being contacted by the media for comment (Barb, Document P9:0100; Louise, Document P7: 0462). Direct feedback was also received by email via the website, by blog postings, or through word of mouth. One group built in evaluation to their group processes so they could measure effectiveness.

> But some of our other smaller goals, such as having more people come to our meetings -- we are not achieving that because we can see by the numbers we are not. Some things are very concrete and measurable and some things it's harder to tell if we are meeting our goals. We review our goals, and look over the correspondence -- do we need to write a letter about an issue? (Meg, Document P13:0140-0145)

Three of the groups used tracking tools to some degree to determine how people were using their website. Contact information was provided on websites, but was reported to be little used.

> I think when we first started forming the organization and sending information out, we tended to get a lot more feedback in the beginning. And now people just sort of take it in, and wait for the next update. (Jen, Document P15:0204-0206)

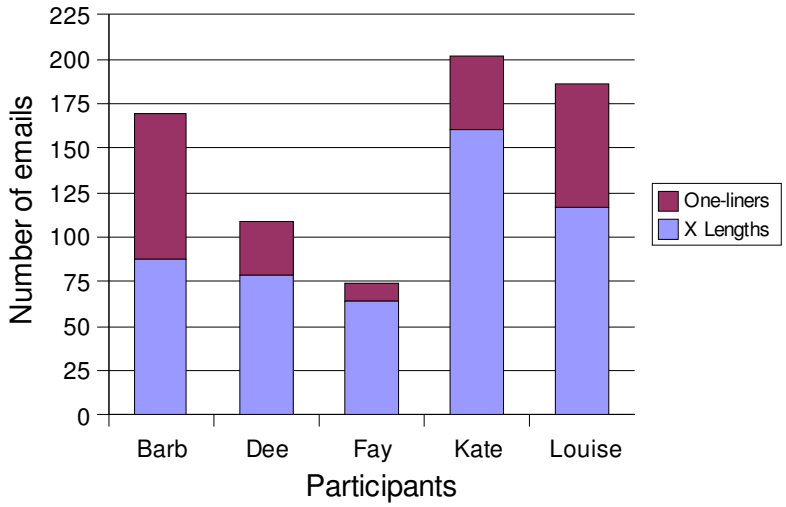
The majority of functions used by informal advocacy groups in the areas of strategizing, preparing to act, and acting were carried out using ICT. Technology was also used to sustain the motivation and energy of the group.

Analysis of Email Use by an Informal Advocacy Group

This section examines the email use of one group. Email usage and function frequencies were collected to provide a snapshot of how informal groups use email. Core working group emails of one advocacy group over a three-month period, August 1, 2005 to October 31, 2005, were analyzed. Participants used the group-mail method for working internally--all working emails were sent to all five members of the core group using the group-mail function. The function "Reply All" was always used for group-oriented interacts. This method was used for strategizing and planning to ensure all members had complete, current information.

A total number of 740 emails were sent among the five working group members during this period and constitute the core working group data used in Figure 6. Some emails had a fair amount of content; however, many were short messages of 12 words or less sent as a quick acknowledgement or response. These messages are termed "one-liners." Figure 6 shows the number of emails sent by each member and the proportion of "one-liners."

Figure 6. Number of emails per participant



The number of emails per participant ranged from 74 to 202 and the proportion of "one-liners" varied from 14% to 52%. The communicative style of the participants likely affected the number of emails sent, and an exploration of the email functions provided further explanation. However, a detailed analysis of differences in individual usage patterns is beyond the scope of this study.

Table 6 presents results on the function of emails sent by the core group. Data are grouped under the following areas: Strategy, Preparing-Publishing, Preparing-Organizing, Group Care, Other, and Technology Reference and descriptors reflect the codes of the analysis. The total number of occurrences per area is noted in brackets after the area heading. The specific function of the email is described in the leftmost column. The total number of emails using the function is noted in italics in the next column, followed by a breakdown of the number of emails performing the function sent per participant. Note that a single email often addressed more than one function.

Table 6. Analysis of Email Use

Function of email	*Number of emails using function*					
	Total per function	*Barb*	*Dee*	*Fay*	*Kate*	*Louise*
A.STRATEGY (458 occurrences)						
Asking for information	*49*	8	3	3	28	7
Forwarding information	*137*	36	28	6	38	29
Reporting	*104*	20	18	21	29	16
Connecting to wider network	*69*	14	6	12	22	15
Raising new issues	*19*	1	3	0	12	3
Reflecting	*38*	3	8	8	11	8
Researching	*30*	8	5	1	10	6
Monitoring	*12*	1	1	0	8	2
B.PREPARING-PUBLISHING (513 occurrences)						
Drafting and editing	*138*	14	17	25	43	39
Asking for feedback	*79*	4	9	9	30	27
Giving feedback	*53*	10	2	1	12	28
Confirming/OKing	*91*	10	19	11	25	26
Sharing tech information	*50*	10	9	3	15	13
Media	*102*	11	25	15	22	29
C: PREPARING-ORGANIZING (140 occurrences)						
Organizing meetings	*96*	22	16	16	25	17
Planning events	*24*	1	10	1	6	6
Presenting f2f	*20*	3	5	0	3	6
D: GROUP CARE (242 occurrences)						
Encouraging	*103*	25	14	7	35	22
Discouraging	*10*	1	4	4	0	1
Reiterating identity	*25*	3	3	1	11	7
Using humour	*42*	10	6	1	12	13
Sympathizing	*10*	1	4	1	4	0
Expressing frustration	*52*	21	12	8	18	12
E: OTHER (123 occurrences)						
Parenting	*18*	4	4	2	4	4
Everyday life	*56*	11	12	7	9	17
Time concerns	*32*	5	2	5	12	8
In the schools	*17*	3	0	0	6	8
F. TECHNOLOGY REFERENCE (233 occurrences)						
Website	*75*	8	7	3	42	15
Document	*71*	6	19	15	18	13

Email	*25*	3	5	2	7	8
Mailing list	*20*	6	2	1	7	4
Telephone	*15*	2	5	3	2	3
FTP	*16*	2	2	1	8	3
Forum	*8*	1	0	0	4	3
Blog	*3*	1	0	0	2	0

Discussion of results

The categories and their properties derived from the Functions of ICT in Advocacy Groups results is presented in Table 7 (as a continuation of Tables 2 to 5.).

Table 7. Functions of ICT in Informal Advocacy Groups: Categories and Properties

Category	Properties
10) Listening	a) Connecting b) "Ear to ground"
11) Shaping ideas	a) Collaboration b) Engagement
12) Sustainability	a)Meaningful experience b)Ethics c)Support

Category 10: Listening

This category derives from the following functions: forwarding information, reporting, and connecting. The functions were common to all groups and, as indicated in

Table 6, were top functions of core group email communication. The category “listening” includes an external receptiveness to events and developments that affected the groups' sphere of work as well as a concern internal to the advocacy goal--that the voices driving the advocacy were heard.

a) Connecting

Informal groups relied on connections across a wide scope and sought relationships with individuals, with groups, with media and government in order to do their work. Advocates sought connections through websites, online search, aggregated news services, and through direct email. Advocates forwarded information acquired through connections to each other and to the wider network through email, forums, and blogs. The technology allowed advocates to share information very quickly. The technology also enabled rapid network-building. The following description provides a definitive example of how email afforded rapid network-building:

> And I got to D through A at Cambridge. And I got to Cambridge through this guy B who's basically the linchpin in terms of world linkage on the issue-- and he's one of the people who has been identifying this issue as a recurrence. P had found a fabulous quote of his on the search. . . And I thought that is such a great quote -- I want to talk to B! So I emailed B, you know -- click B -- and I say "B! I love your quote and who the hell are you anyway?” So he sent me back some stuff and we have a correspondence and he was checking in from time to time -- you know -- how are things going? And at one point I emailed him back and said -- “Well, we built a website, we talked to this and that government, we created a lobbying document and so far nothing much has really happened. And we're trying to create a case for it as a public health issue.” And I was sort of like -- we're trying but nothing much is really happening…
>
> And he was SO excited. He's an advocacy guy -- you know -- grownup hippy, Mr. Advocacy up and down, human geographer, sustainability agenda, all of the great causes. And he was so excited about what was going on. He said, "This is fabulous! and the public health case… " and he copied 30 people around the world on this email. One of them was R, Chairman of the Department at Cambridge. He said, “You should contact R who's written this great book and who has been very interested in this

> issue as a public health intervention." And I thought, "Yeah, right, I'm contacting Professor R at Cambridge -- I don't think so." And shortly thereafter along comes a little note in an email from Professor R: "Dear Tina, I am very interested to hear more about your public health approach" and he's a great buddy now -- he came and stayed with us last summer. So that was a big connector moment when B copied all these people on his answer to me. (Tina, Document P6:0315-0339)

b) "Ear to ground"

Advocates also reported on their own experience in their local school, with the K-12 parent community, and with the formal education system. This listening resulted in meaningful connections that grounded and reinforced the group goal. Often, face-to-face listening occurring in the advocate's everyday life. The reporting was done by email, which was forwarded and copied and sometimes posted to forums or blogs.

Category 11: Shaping ideas

This category derives from the functions drafting and editing, and references to document and media. Developing group documents was a main function of the groups -- group documents represented their "official" collective voice. The functions were common to all groups and, as indicated in Table 6, were primary functions of core group email communication. The property "collaboration" refers to the intense, communal interaction of these functions that, like the Category 10, was conducted at a rapid pace. The property "engagement" refers to the level of participation in the collaborative process.

a) Collaboration

Discussion of ideas was collaborative, both among the wider network and within the groups themselves. Discussion shaped ideas and took place in group emails, in face-to-face meetings and on the online forums and blogs of the wider network. The following

example describes online dialogue as contributing to "a broadly-based and democratic forum."

> The impact of the Internet on educational discourse is quite remarkable--just think of it, a few short years ago we would not be able to trade our varied viewpoints, analyze upcoming legislation (thanks to the recent leak in draft/outline form) and anticipate the intentions of legislators who are less than forthcoming with their plans. This enables us to, even though our group is relatively small,(and I suspect its numbers are increasing as emails are forwarded and posted on other bulletin board sites) to offer constructive criticism and to candidly express our perspectives and expectations on issues that are important to the operation of our public schools. . . . One of the key aims of all governments, no matter what their political stripe, is to try to control news and information and thus shape public opinion. Those little clicks on our computers undermine this to a modest degree, and contribute to a broadly-based and democratic forum. (NH, Document P35:0007-0028)

Exposed to a wide range of ideas and information, the advocates distilled the information through their own filters to create group documents that represented their issue. Advocates were motivated to put forward ideas for documents when experience with an aspect of the issue motivated them; for example, when they identified a gap in public discussion or when they wished to correct misinformation. Although the data indicated one case of an initial research document being written by one group member and another case of a group using a process of public consultation for their central document, by the time groups were established, documents were drafted in collaboration with other group members. Ideas were put forward as a discussion of main points or as a draft; this process was sometimes done in face-to-face meetings, but most often by email. Email was appropriate for this purpose due to its group distribution function and, when the document text was pasted into the body of the email, the forwarding function that stored previous drafts below. Editing varied from one-line comment indicating approval in an email message, to detailed editing using the editing functions of word processors

and submission of a new draft as an email attachment. All groups sent final drafts to internal email groups for approval before publishing. Thus advocates saw the message of the document repeated many times as members added their particular layer of meaning and as editing rationale was presented. The collaborative shaping of ideas resulted in collective learning and in ensuring that participating group members were well-grounded in group issues.

b) Engagement

The flurry of interaction involved in drafting documents was intensely engaging. One participant noted the ephemeral quality of email – a quality that sometimes frustrated advocates, but also made participation less threatening. Advocates engaged at any level -- even by reviewing and replying with a one-line confirmation. Through this broader participation, advocates increased the amount of common experience, an important factor in building trust among the group.

Category 12: Sustainability

This category derives from the many functions that sustain individual participants in their work, contributing to the health and viability of the group. It includes then following functions: encouraging, confirming, asking for feedback, giving feedback, and expressing frustration. The functions were common to all groups and, as indicated in Table 7, were primary functions of core group email communication. The properties of Category 12: Sustainability are “meaningful experience,” “ethics,” and “support.”

a) Meaningful experience

Participants were drawn to advocacy through a connection meaningful to them. In addition, the informal advocacy work of the groups under study had many aspects, such as the following, that fostered meaningful experience for individuals:

- Participation was voluntary -- members chose to become and stay involved.
- Advocates could select an area of work according to expertise or preference.
- Group work had a high potential for interaction.
- Collaborative work entailed a high level of feedback and acknowledgement.
- Collaborative work resulted in action.

A consequence of meaningful experience was motivation.

b) Ethics

A concern for inclusion, fairness and accountability underlay the work of the groups. Advocates were critical of unethical practices, such as misrepresentation or lack of representation, and the use of misinformation. Their critique made them sensitive to ensuring that their own practice was ethical. To this end, they attempted to make processes transparent and inclusive, and used the affordances of technology, such as group mail, to do so. Formal groups held paid workers accountable through set policy. Informal groups needed to create their own ethical framework, as demonstrated in the data, for example, the discussion of getting permission before posting items on their website or citing individuals, and the use of group email for consensus on final drafts.

c) Support

The core group email analysis showed “encouraging” as being a primary function. Individual advocates also supported each other by acknowledging emails, giving feedback to suggestions and ideas in general, and to requests for feedback. Group

members were validated through feedback, and email enabled efficient, easy feedback. Also, the informal climate of the groups allowed advocates to express frustration and receive sympathetic responses. A clear understanding of group roles and processes prevented frustration, and advocates reminded each other of these. Using group email allowed reminders and other support to be open, transparent, and beneficial to more people than the target advocate.

Summary: Functions of ICT in Informal Advocacy Groups

This section focused on the functions served by technology in informal advocacy groups. Advocates used ICT such as email, website, blog, online forum, and online petition as well as face-to-face meetings, telephone, and fax to carry out their work of strategizing, preparing to act, and acting. Advocates listened in the wider network to receive information affecting their issue and "kept their ears to the ground" to provide a strong basis for group voice. They shaped ideas through dialogue in the wider network and through intense collaborative interaction among the internal group. Groups used technology to distribute their actions. Advocates developed ethical group practices to support individuals and sustain the health of the group, improving its ability to act. Technology, especially email, appeared to speed up the pace of group functions and also to further participation. Reliable and easy access to Internet was required to participate as a core advocate of the participating groups.

Negative Evidence

- Little socializing -- The researcher had expected that the interaction of the advocates would spill over into informal, social interaction. This was not evident in the results.

Participants appeared to be focused on the advocacy goal and only referred to their everyday lives in terms of the effect of the advocacy work on their personal experience, e.g., not having enough time, and in describing their personal experience of the advocacy issue. In the thousands of interacts of the study, only seven were coded "socializing," and of those only four occurrences referred to face-to-face social gatherings. It is likely that relationships formed in the scope of advocacy work transferred to the social sphere, but evidence of such relationships were not found in the data.

- Funding -- There was not the expected emphasis on needing money to carry out advocacy work. There were some references to money regarding affording technology access and a few comments regarding the imbalance between the formal and informal systems' access to resources for publicizing ideas in the mainstream media.
- Training programs -- Advocates did not report accessing face-to-face or online technology training programs.
- New software -- Advocates did not formally survey or search for software, but used what was familiar and available to them or what they saw others in their network using.
- Acting individually -- There was little evidence of advocates acting individually on group actions. One reference (writing research alone) occurred during group formation. Otherwise, advocates articulated the need for collaboration in preparing to act and confirmation before acting on behalf of the group.

Categories, Properties and Consequences

Twelve major categories have been identified, presented, and discussed in the main subsections of the study. The categories and their properties are presented together in Table 8 -- Overview of Categories, Properties, and Consequences. The third column contains consequences from the Conditional Relationship Guides that guided the selection of a core category.

Table 8. Overview of Categories, Properties, and Consequences

Category	*Properties*	*Consequences*
1) Sparking connection	a) Awareness of problem b) Identifying self in problem c) Connecting with others	Participation: The beginning
2) Identity	a) Focus b) Credibility	Meaning: Personal value
3) Informal	a) Inclusive b) Open c) Fluid	Participation: Inclusion
4) Voice	a) Representing b) Listening c) Simple language	Dialogue: Understanding
5) Control	a) Barriers b) Spin c) Frustration	Frustration: Spark

6) Common ground	a) Common experience b) Culture c) Trust	Meaning : Trust
7) Access	a) Available b) As needed	Participation
8) Play	a) Experiment b) Pleasure	Learning: Personal satisfaction
9) Collaboration	a) Open b) Community	Learning : Community
10) Listening	a) Connecting b) “Ear to ground”	Learning : Grounded Knowledge
11) Shaping ideas	a) Collaboration b) Engagement	Learning : Realization
12) Sustainability	a)Meaningful experience b)Ethics c)Support	Meaning: Motivation

In reviewing the scope of the 12 categories and marking their consequences, the researcher repeatedly returned to an understanding of the study results as involving three overriding concepts:

1. the ecology of informal advocacy groups as a complex network;
2. the process that moved from individual awareness to collaborative action and the conditions for success;

3. barriers to that movement.

The main analytic idea of the exploratory study -- a core category -- was sought. As advocated by Corbin and Strauss (1990), "The other categories will always stand in relationship to the core category as conditions, action/interactional strategies, or consequences." Through using the consequences of the 12 major categories, the researcher completed the reflective coding matrix to help uncover a central, core category. In the reflective coding matrix--a table originating with the consequences identified in the conditional relationship guide--the categories are the basis of defining and describing a core category. The 12 major categories and sub-categories can be seen, along with abstractions developed from them, in the matrix as properties, processes, dimensions, contexts, and modes for understanding the consequences of the core category. During the analysis and the development of the reflective coding matrix (Table 9), one participant quote dogged the researcher and ultimately guided the choice of core category. The quote was this:

> I recall a wise woman saying at a conference I attended that effective advocacy often works like drops of water falling on a stone. It might take a lot of drops, but it will eventually leave a mark. (Louise, Document P34:0090-0091)

The metaphor of water on stone triggered an interpretation of the informal learning of advocacy groups occurring as a flow around barriers within in a fluid network of connections. The researcher chose as a core category an abstraction: the metaphor of water flowing around rock. Hence the core category of the study is "Water Flowing around Rock" (Figure 7).

Figure 7. Water flowing around rock.

The 12 major categories relating to the core category may therefore be construed as water categories, rock categories, and categories essential to the flow of water around rock.

Water categories pertain to the movement from individual awareness to group action. They include: Category 1: Sparking connections; Category 4: Voice; Category 8: Play; Category 9: Collaboration; Category 10: Listening; and Category 11: Shaping ideas. Rock categories are barriers to that movement: Category 5: Control; and Category 7: (No) Access. The other categories are essential characteristics of the flow -- the flow to successful action: Category 2: Identity; Category 3: Informal; Category 6: Common ground; and Category 12: Sustainability.

Table 9. Reflective Coding Matrix

CORE CATEGORY	*Water flowing around rock*				
PROPERTIES	*Flow*	*Flow: Increasing*	*Flow: Merging*	*Flow: Sustaining*	*Rock*
PROCESSES	*Dialogue*	*Learning*	*Participation*	*Meaning*	*Frustration*
DIMENSIONS	• Say it in ways we understand • Voice • Listen and understand • Representing • Borderland • Relationships • • Changing (environment)	• Informal • Play • Experiment • Pleasure • Community • Shaping ideas • Collaboration • Feedback • Listening • Monitoring • Changing (self)	• Informal • Open • Inclusion • Having access to technology • Identifying self in problem • Connecting to others • Communicating • Sharing tech knowledge	• Personal value • Trust • Identity • Credibility • Engagement • Encouragement • Common experience • Familiar culture • Common goal • Everyday life	• Control • No voice • Nobody is listening • Misrepresentation • Sparking connection
CONTEXTS	Acting	Building grounded knowledge	Potency	Engagement	Facing barriers
MODES FOR UNDERSTANDING CONSEQUENCES	Successful dialogue is the essence of advocacy.	Informal learning derives from purposeful, collaborative work.	Participation increases connections and strengthens the network.	Motivation comes from an individual's meaningful experience.	Frustration sparks action to overcome barriers.

Interpretation

This section interprets the core concept of the study. Scott (2004) contends this process "weaves together all of the unraveled threads" of the study, and allows for theory generation. The emergent theory is related to the theoretical literature to test for relevancy and acceptability.

The core category of the study, "Water Flowing around Rock," is supported by five properties. The properties, processes, dimensions, contexts and modes for understanding consequences are discussed below in relation to the literature reviewed previously.

"Flow"-- Successful dialogue is the essence of advocacy.

The property "Flow" has as a process "Dialogue" and a context "Acting." All participants had a concern with having a voice, and all successful actions relied on successful dialogue. Action constituted dialogue -- for the participants, successful dialogue was the essence of advocacy. The dimensions of "Flow" are as follows: "Voice;" "Representing;" "Listening and Understanding;" the in vivo code "Say It in Ways We Understand;" "Borderland;" "Relationships;" and "Changing (environment)."

The significance of the role of dialogue is recognized throughout the literature: dialogue is how relationships are made; dialogue gives individuals a voice; dialogue enables listening; dialogue demands participation. The literature describes attempts to support and encourage dialogue using ICT -- attempts using only online technology were seldom successful. Recall Tough's (1979) early prediction of the possibility that computers would "provide the richest possible student-system interaction where the student is free to construct natural language responses, ask questions in an unrestricted

mode, and in general exercise almost complete control over the sequence of learning events" (p. 126). Successful dialogue seldom occurred in the study. The literature recognized the prerequisite of trust in successful dialogue (Angus, 2001; Ettling, 2001; Habermas, cited in Salter, 2004; Tough, 1979) -- and in successful online dialogue in particular (Preece, 2002; Nichani, 2000; Hampton, 2003; Wenger, 2005; Atton, 2004). In the study, successful online dialogue was only seen when trust existed: for example, with core group members who knew each other well both face-to-face and online. In other words, diverse modes that are integrated into learners' lives may be more effective than contained, online interaction. Habermas (Salter, cited in McCaughey, 2004) contends the communicative requirements of dialogue (verification, normative acceptability and sincerity) cannot occur virtually. The study data support this contention; for example, participants trusted people more easily when there was a shared culture or shared experience and there was a perceived higher value of face-to-face dialogue. Like the study participants, the literature advocates combined online and offline communication to various degrees.

The study data show intense internal dialogue that served to report feedback from peoples' experience that then shaped the advocacy message -- the message to be the basis for public dialogue associated with action. This condition is recognized (Angus, 2001) as the standard process of democratic interchange in "meeting places" and "the public sphere." In the study, the majority of internal dialogue between trusted, known core group colleagues occurred online – in a virtual "meeting place."

Voice: "Those who aren't heard are largely ignored" (Salter, cited in McCaughey, 2004). The right to have a voice was a main goal of study participants who came into

advocacy out of frustration at not being heard. “Nobody is listening!,” they said. This classic spark of the emancipatory paradigm is clearly supported in the participatory model literature. Groups create the voice of advocacy for the individual.

Representing: The literature showed the concern for open and inclusive processes among the social justice groups so that representation of advocates is “real” and based on advocate experience. The study participants, having experienced misrepresentation, were especially careful to listen respectfully to diverse voices within their groups and were especially vocal in criticizing a representative group that they felt did not fairly represent them. Given open and inclusive processes, representation was facilitated by the accessibility of email communication and its ability to widely distribute invitation to participate.

Listening and Understanding: Dialogue is a continuous interplay that must include listening to hear what is shared and what is different between people. Dialogue without listening is simply a one-way directive. The literature shows participatory models built in feedback systems that require listening. In the study, listening required meaningful connections with people experiencing the problem and validation of their voice.

The in vivo code “Say It In Ways We Understand”: Study results were clear that the language of dialogue should be simple and clear not only to ease understanding, but also to respect differences among the advocates. “Who can understand that? (Laughs),” said a participant of a message in “edu-speak.” While this concern was not specified, it can be deduced from the literature. For example, the International Study Circle advocates found the most benefit from reading the stories of advocates in other regions, and literature on

native reporting and journalists using blogs supported the idea of the power of the authentic voice.

Borderland: The borderland metaphor was put forward as a way to understand a place of negotiation in the context of formal and informal systems seeking dialogue. In the study, dialogue only succeeded when advocates shifted to a neutral place where formal control was loosened and informal recognition of some needs of the formal system occurred. This event was not found in the literature, which described the formal and informal in opposition. Horton and Freire (1990) continued to debate over whether social justice learning could take place in the formal system: Horton believed that the formal system was incapable of recognizing participatory methods. In the study, failure of dialogue was often due to intractability of the formal systems and its compartmentalized structure that hindered interaction. In the discussion of implementing informal systems of multi-functional, networked technology into corporate organizations, Gotta (2004) and Cross (2004) discussed the need to weigh the benefits of informal systems against the decrease of control. However, more recent literature refers to blurring of borders, to spilling over borders, and to the breakdown of hierarchical structures and a move toward the loose lateral networks typical of informal learning. Cross (2004) and Siemens (2005) describe a chaotic, changing context in which a responsive awareness and ability to adapt to changed, or perhaps new, environments are more important than the concept of negotiating Borderland. What is border when the land itself is changing?

An aspect of Borderland that still fits in this context, however, is the need for a place where dialogue can succeed. The researcher had theorized that this meeting place must be neutral; however, based on reference to Siemens (2005), would add that it be a

place of, not only neutrality, but of equality. Angus (2001) used the term "public space" to describe a place for democratic debate and emphasized that, for people to have a voice, "the public places in which they participate have to have real effectiveness in relation to other forms of organization and communication in society" (p. 34). In the study results, ineffective connections between formal and informal systems undermined successful dialogue.

Relationships: "The network IS the learning" said Siemens (2005). Connections are relationships that allow access to or transfer of knowledge, as knowledge is distributed. The study data showed participants sought a wide range of diverse relationships. In the literature, strong relationships are based on common practice and are sustained by interaction and trust. The quality of relationships affects the success, for example, of dialogue (Angus, 2001). Diversity of relationships adds to the strength of the network. Research also showed the beneficial effect of even weak connections (Hampton & Wellman, 1999).

Changing (environment): A principle of adult education is that learner motivation is grounded in learner life experience and manifests itself in a desire to change self or environment (Tough, 1979). "An interest in controlling their environment" is one of the three human interests named by Habermas (1971); another being "an interest in freeing themselves from ignorance, in self-awareness." The last interest, according to Habermas, predicates emancipatory learning with its goal of action. Action is also the third element and goal of participatory learning (Beder, 1996). Similarly, Suda (2001) describes one aim of study circles as "to strengthen individual's ability to influence their own life, and to be able, together with others, to change society in accordance with their values and

ideals." Study data show participants articulating the action goal as the main element of group identity and as a primary task. The group goal was a driver and touchstone for subsequent work -- participants referred back to it repeatedly.

"Flow: Increasing" -- Informal learning derives from purposeful, collaborative work.

The property "Flow: Increasing" has as a process "Learning" and a context "Building Grounded Knowledge." The advocates' informal learning was contained in their purposeful, collaborative work. The dimensions of "Flow: Increasing" are as follows: "Informal;" "Play;" "Experiment;" "Pleasure;" "Community;" "Shaping ideas;" "Dialogue (internal);" "Feedback;" "Listening;" "Monitoring;" and "Changing (self)."

Informal: Informal learning benefits are well documented in the literature (Tough, 1979; Hampton & Wellman, 1999; Siemens, 2003; Cross, 2003). Informal learners control how, and how much, they learn. Study participants learned what they needed in a way that was currently available to them, usually through their network via mentors, "helpers," observation, and participation.

Play: While this dimension was not supported in the literature, play may be a factor in innovation. The dimension originates from the words used by some advocates to describe their learning, such as "playing around" and "fooling around."

Experiment: The literature recognized that informal learning is self-directed -- the learner chooses learning method. The study showed incidences of experimentation, i.e., learning ICT for various projects. Advocates observed the work done by others and "just fooled around" until they could apply the technology. One participant likened learning ICT to prior learning (i.e., gadgets on father's fish boat), and another said she had never

done it before, but “had the time to fool around.” In the absence of formal instructional design, learners appeared to use methods that were familiar or utilitarian. Although not found in the study, but related to the discussion on learning by experimentation, Menzies (cited in Rose, 2004) refers to Innis' insight that innovation often comes from marginalized people: “They will innovate, they will come up with wonderful breakthroughs in terms of new applications, particularly in communication, because with the old configurations they were left out.”(¶8)

Pleasure: This dimension is not specifically supported in the literature, although Tough refers to expectation of pleasure as a possible motivation for learning, and Wenger (2005) and Cross (2003) refer to the basic pleasure of human interaction as a factor in collaboration. Some study participants expressed pleasure and satisfaction in personal learning achievements.

Community: The dimension of community is defined in the literature, most aptly by Wenger (2004): “In pursuing their interest in their domain, members engage in joint activities and discussions, help each other, and share information. They build relationships that enable them to learn from each other.” These events were found in the study data. Collaborative work, while producing materials for the group, also resulted in common experience -- a factor in developing trust.

Shaping Ideas: Some study participants expressed satisfaction with collaborative drafting, because of the opportunity for linking to knowledge that arose out of other advocates' experience. Others felt that using experienced advocates as role models enabled them be more confident and able to express ideas, and led to their own increased participation. Asynchronous text environments, such as those used by study participants,

are recognized in the literature as powerful tools for reflective reviewing and composing (Preece, 2002).

Dialogue (internal): The study email analysis shows the extent and variety of internal dialogue of one group. Other technologies are identified in the literature, e.g., synchronous chat, and synchronous conferencing, but were not used by study participants. The intensity of internal communication, including dialogue, was illustrated in the Analysis of Email in the study -- an intensity noted as typical to developing social action in "meeting places" (Angus, 2004; McCaughey & Ayers, 2003; Atton, 2004).

Feedback: Study participants frequently checked for or offered feedback -- part of the commitment to transparency and openness as well as the collaborative process. Comfort with asking for and giving feedback became part of the culture of the sample group of the email analysis. While the literature does not reflect this, the importance of feedback is recognized by emancipatory educators: "The less people are asked about what they want, about their expectations, the less democracy we have." (Horton & Freire, 1990).

Listening: Listening to people was a main concern of study participants. Again, appreciation of the importance of listening was grounded in negative experience, as one participant exclaimed, "Nobody is listening to us!" In the literature, support is found for making time for listening as a factor in inclusion, patient listening as a strategy for eliciting advocate ideas and stories (Ettling, 2001), and hearing personal stories is considered an effective way of listening (Ettling, 2001; Menzies, 2005).

Monitoring: Study participants connected monitoring to accountability, and acted as "watchdogs" to see that funding promises, for example, were carried out. Concerned

with credibility, some also set up basic internal monitoring to ensure their systems were working. The literature on new social movements refers to monitoring of government, corporate, and media systems. Wenger (2005) refers to the importance of a group member monitoring the effectiveness of technology use as well as, with others, the importance of preventative monitoring regarding informal group viability.

Changing (self): The development of self was a strong theme in the literature on participatory models and in adult learning and informal learning. "The more people participate in the process of their own education, the more people participate in defining what kind of production to produce, and for what and for why, the more people participate in the development of their selves" (Horton, 1990). Although the articulated goal of the advocacy groups was to change the environment, the literature recognizes that individual change is a marker of successful learning. Cross (2003) describes the changes in self-identity that learning requires as powerful. Study participants recognized changes in themselves regarding ICT skill, writing and public speaking ability, organizational ability, and advocating ability (e.g., "I've never done this before!").

"Flow: Merging"-- Participation increases connection and strengthens the network

The property "Flow: Merging" has as a process "Participation" and a context of "Potency." From the first steps into advocacy, the advocates' participation increased their connections and strengthened the network. The dimensions of "Flow: Merging" are "Informal," "Open," "Inclusion," "Having Access to Technology," "Identifying Self in Problem," "Connecting to Others," "Communicating," and "Sharing Tech Knowledge."

Informal: The informal learner is by definition motivated. Informal learning processes are collaborative and require participation. Study participants chose their level

of participation, which fluctuated depending on their life demands. This dimension strongly links motivation to participation. Further, in the emancipatory paradigm, the original spark is a powerful motivator that is grounded in the learner's life.

Open, Inclusion: Processes are open and welcoming – these expectations were expressed repeatedly by study participants. Advocates structured processes that were transparent (e.g., using group email for all internal communication) not only for efficiency, but also to ensure equal access to group information. The group's power is dependant on the strength of the individual members and their ability to work together. Membership ebbs and flows. Full access to group knowledge and strategies is important. Therefore transparency, trust, and inclusion are crucial to group success. Diversity is seen as a strength -- members' strengths are known, appreciated, and shared. Different ways of knowing (Ettling, 2001) are accepted, and different levels of participation are welcomed. Openness and inclusion contribute to advocate engagement and satisfaction. According to Cross (2003), exclusion results in failure to learn. The literature on informal learning communities and social movements clearly supports the benefits of openness and inclusion. Shenk (1979) points out a negative effect of exclusion: "Instead of meeting to discuss and debate issues of common concern to the society, members of these virtual communities meet largely to promote their own interests and to reinforce their own like-mindedness. They tend to exclude anyone who disagrees. As a consequence, however, they also reinforce the fragmentation and factionalism of modern society" (p. 111).

Having Access to Technology: Salter (2003) equates access to Internet communication with the right to be heard, saying "Those who aren't heard are largely ignored" (p. 131), and Cross (2003) states "Learning requires access and the opportunity

to contribute." The important role of the Internet as a connection to relevant information, interaction, publishing, and distributing ideas makes access necessary for meaningful participation as an advocate. Study data showed that advocates with no or unreliable access participated less. Access also enabled making a wide network, including many "weak connections" that increased the size and potential of the network and often enriched both online and offline interactions (Hampton, 2003). The results of the advocacy work described herein were considerable—participating groups effected: public awareness, a province-wide school seismic safety survey, and a commitment of $1.5 billion for seismic school upgrades; the priority of public education funding issues on the political agenda; the reversal of public policy perceived to be unjust; the reinstatement of $2.8 million for inner city school support; the widespread distribution of a vision of public education created with the participation of 1600 people across BC; public education research; and public events for dialogue on public education. Without Internet-based ICT, which facilitated the speed, depth, and interaction of advocacy work, participation (and therefore informal learning) would have been restricted to advocates with sufficient time, resources, and existing level of skill to create similar results using face-to-face and traditional technology.

Identifying Self in Problem: This dimension is supported in the literature on learner motivation. Identifying self in problem is related to wishing to be a part of and contribute to the larger community and thus to engagement (Cross, 2003). In the experience of study participants, identifying self in problem was a first step to meaningful participation.

Connecting to Others, Communicating: Participation requires connection, and raising awareness requires broad, connected networks. Study participants sought a variety

of connections. The literature covers this dimension in depth -- the discussion ranges from the effect of the Internet on quantity and quality of connections, through "appropriable social organizations" (Coleman, 1988), to "the community" (Wenger, 2005), to connectivism (Siemens, 2005).

Sharing Tech Knowledge: Study participants willingly shared technology knowledge -- and reported learning by simply observing each other. This kind of learning is supported in the literature on informal learning. In the study, however, learning from peers directly or indirectly (i.e., observing a model and then experimenting) was by far the most frequent method of learning to use technology, to an even greater degree than "the 80% informal learning" in the workplace identified by Cross (2003).

"Flow: Sustaining"-- Motivation comes from an individual's meaningful experience

The property "Flow: Sustaining" has as a process "Meaning" and a context "Engagement." For all participants, meaningful experience motivated them to join in groups to advocate, and meaningfulness continues to be a requirement for their engagement in the work. The dimensions of "Flow: Sustaining" are "Personal Value," "Trust," "Identity," "Credibility," "Engagement," "Encouragement," "Common Experience," "Familiar Culture," "Common goal," and "Everyday Life."

Personal Value: The literature supports expectation of personal value as a motivation for learning. "The benefits anticipated by the learner are not only intellectual, cognitive, and material; many are emotional or psychological, including pleasure, satisfaction, self-esteem, impressing others, and receiving praise" (Tough, 1979, p. 45). Also, perceived personal value is a factor in engagement in learning. This factor was reflected in the study data.

Trust: This dimension was strongly supported in the literature. Trust is a critical factor in dialogue and in successful collaboration. Learners must "buy in" (Suda, 2001) to the democratic, collaborative process and this requires trust. Often a missing element restraining participation in formal learning (Preece, 2002), trust between participants is more likely in informal learning. Trust is increased by common goals and values, common experience, and common culture and is developed over time. Trust is tied to participation and engagement. Study participants discussed the trust dimension and recognized its complexity.

Identity: The literature supports the importance of identity and self-esteem. Learning is sometimes taken up to help move towards "an ideal self" (Tough, 1979). Also, learning is equated with change, however slight, in learner identity. Some study participants, on accomplishing a task, expressed satisfaction (e.g., "I never knew I could do that!"). Positive change in self can be a strong motivator. The dynamic between individual and group is important (Wenger, 2005); individuals are more important in the holistic relationship than for any individual achievement (Schuller, 1999).

Credibility: Credibility was a major concern of study participants. Without benefit of formal protocol and perceived validity, informal group participants regularly attended to their public credibility. This aspect was not found in the literature; however, the importance of credibility in communicative dialogue was found in Habermas (Salter, cited in McCaughey, 2004).

Engagement: Freire (1990) describes engagement: "Education is before, is during, and is after. It's a process, a permanent process. It has to do with the human existence and curiosity." (p.118). Study data revealed advocates' needs "to find out" and "to do

something" as originating in and inseparable from their life experience, hence their advocacy was very meaningful to them. Informal learning was integrated in their lives as an important process. The idea of learning as a life process triggered by intrinsic motivation is found in the literature (Tough, 1979; Siemens, 2006; Horton & Freire, 1990). Angus (2001) refers to participants in democratic dialogue being motivated by "the wish for extensive and inclusive participation" and suggests that grounding in meaningful engagement leads to a wider and more powerful distribution of important ideas. Cross (2003) also links engagement with empowerment and with the depth of learning.

Encouragement: Strongly supported in the literature as an affective factor in learning, this dimension was found throughout study data. In particular, email analysis data shows frequent encouragement.

Common Experience, Familiar Culture, Common Goal: "The process of democratic interchange betweens a continuous interplay between what is common, or shared, and what divides them, or in what sense they are different" (Angus, 2001). Although Weick (1979) argues, "The common assertion that people organize in order to accomplish some agreed-upon end is not essential to an explanation of the orderliness found in concerted action, nor is goal-governed behaviour that evident in organizations" (p. 239), the common goal of advocacy brought study participants into their groups, and appeared to continue to be a motivator in participation and a focus that directed group actions. Learner commonalities, whether existent or constructed through collaborative experience, are recognized as a factor in participation, trust, and meaningful learning. The shared goal of participatory groups may ensure an existing commonality in informal

learning groups that is not necessarily present in formal learning groups. Wenger's (2005) "communities of practice" are premised on common experience and interest.

Everyday life: Lived experience contains the initial frustration and subsequent motivation to work with others to overcome barriers that characterizes informal advocacy. Grounding learning in every day life keeps a meaningful, local connection to the advocacy work. The importance of grounding work in human context as opposed to the abstract world of "data-base knowledge" (Menzies, 2005) is a theme in the recent literature on the alienating effect of technology. Adult and informal learning literature connects relevance to learner satisfaction.

"Rock" -- Frustration sparks action to overcome barriers.

The property "Rock" has as a process "Frustration" and a context "Facing Barriers." "Rock" is an essential element in the theory as it is the genesis and focus of advocacy. Advocates analyze "Rock" and work to change it. Frustration at "Rock" sparks action to overcome barriers. The dimensions of "Rock" are "Control," "No Voice," the in vivo code "Nobody is Listening," "Misrepresentation," and "Sparking Connection."

Control: Control of communication, participation and voice appeared frequently in study data. The literature of informal learning and of social justice movements, especially, discusses this dimension. Control of access or control of participation can take place through direct action blocking access, through system design (e.g., editorial policy), or through overpowering imbalance (e.g., "dwarfing"). Speed and scope of response to controlled hierarchical systems is a strength of lateral networked groups using ICT to "flow around the rock." Study advocates controlled access to their websites, online forums, and blogs. Although open, inclusive processes were valued and appeared to be

practiced, one incidence of removing a participant from an online forum was reported in the study data. Gotta (2004) spoke to the importance of finding the proper level of control in applying informal systems—it is realistic to expect informal groups develop an accepted level of control.

No Voice: The literature identifies "No Voice" as a failure to uphold a democratic right (Wuthgow, 1998; Putnam, 2002; Angus; 2001). In participatory learning literature, the need for a voice is the original motivation for learning, as it was for study participants. Participation in the informal group created a voice for them, although that voice was not always heard.

The in vivo code -- Nobody Is Listening: Listening to people informs decisions and grounds understanding to human experience. Not listening ignores reality and prevents understanding of what is really happening, leading to ineffective decisions. Purposely ignoring people's voices is a form of control – and invalidates people's needs. The literature on social movements recognizes "Not Listening" as a form of control. For study participants, frustration at being ignored led to action, and the advocates were regularly ignored by formal systems such as government and official school groups, that may not be required to listen to voices outside their systems. Weick (1979) suggests formal organizations need use open models only to address ecological change, and further, may choose not to address ecological change – but exist in "organizational inertia".

Misrepresentation: Misrepresentation is also a barrier to being heard. The dimension is not identified in the literature specifically, but is informed by the concept of "framing" (Atton, 2004) -- a strategy used "to minimize ideological threats by representing the actors as deviants on the margins of society" (p. 32).

Sparking Connection: Study participants came to advocacy once a level of frustration was reached. In this sense, reaction to a barrier resulted in learning and in the beginning of advocacy. The instances of realization and of connection were powerful, meaningful, individual experiences. Meaningfulness is a key factor in the literature on motivation. Not only did study participants' motivating experiences act as a catalyst, they also acted as touchstones to reinforce goals and engagement.

Summary of Interpretation

The concept, "Water Flowing around Rock," provides a useful representation for the interpretation of study findings. Its properties, categories, and dimensions, grounded in study data, are recognized in research literature to a large degree. The image of water flowing around rock (Figure 7) stands as a theoretical model and as a metaphor for the informal learning of advocacy groups:

- Rock blocks voice and participation. Frustration builds like water rising behind a dam, and eventually overcomes the barrier by trickling through a widening crack, by flowing over or around the barrier, or by building to critical pressure to break through the barrier. Hence frustration sparks action to overcome barriers.
- Flow to action increases through the learning process, building grounded knowledge. Informal learning derives from meaningful, purposeful, collaborative work—its potency increases as many diverse streams merge in a process of participation.
- Flow intensity and volume is sustained through meaningful engagement. Motivation comes from an individual's meaningful experience.

Informal advocacy groups use ICT to increase participation and engagement, and to overcome barriers in their flow toward democratic participation and public dialogue.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter provides conclusions and recommendations developed from the study data. The theory generation of the study is simply a sub-process that may add to the larger process of understanding informal learning. The conclusions reported herein provide some explanation of the informal learning of advocacy groups in this place at this time. The concepts are grounded in study data collected during a short period within the long process of advocacy.

An assumption of this study stated in Chapter 1 was that there was little research on social justice learning because it took place outside of the formal systems of research funders. It appears this has long been the case--during the completion of the final draft of this document, the researcher was shocked to come across the following quote recommending research in informal learning that predates this study by more than two decades:

> It is not possible yet to analyze definitively the relationship between nonformal education, social movements and policy outcomes (i.e. measurable changes in values or institutional structures) anywhere. Research on the impact of the folk high school in Scandinavian countries links adult education to the emergence of a humane, welfare state… Studies of the impact of nonformal education on community life are needed. (Welton, 1983)

"Nonformal education" and the informal learning of social justice groups are important to democratic societies. In the last decade, access to ICT has greatly extended the scope and facility of informal learners, and specifically, of informal advocacy groups. Yet while there is a large body of research on ICT use in formal learning, little research exists on

the use of technology in informal learning. Lack of research in this area has been decried by educators (Bereiter, 2002; Gray & Richards, 2000; Spencer, 1998), and represents a problem of growing significance as democracy and social equity are increasingly challenged and the struggle for control and ownership of technology continues.

The purpose of this study was to explore how advocacy groups utilize ICT to support informal learning. Accordingly, the study explored the following research questions:

1) What role, if any, does technology play in the formation and structure of advocacy groups?
2) Do informal advocates access technology? If so, how?
3) Do informal advocates experience barriers to technology use? If so, what interventions and strategies, if any, are used to overcome barriers to technology?
4) Are advocacy groups currently using technology? If so -
   a) How do informal advocates learn how to use technology?
   b) What functions does technology serve for informal advocates?

It was hoped that the study would add to research on ICT use in participatory democracy; provide informal learners with a model of using technology successfully as a tool for advocacy; and make implications for the use of technology in formal learning based on the use of technology by autonomous learner-groups in informal structures. Conclusions and recommendations are organized under the following sub-sections:

- ICT and Democracy: Wider, Deeper, Faster
- ICT and Democracy: Access is Critical
- ICT as a Tool for Advocates: Suggestions for Success

- ICT Use by Advocates: Implications for Informal Learning

Note that although the researcher focused on ICT use, study participants considered ICT as one of many available tools useful to their advocacy work. The use of ICT was integrated with face-to-face and offline processes -- study findings were to reveal the importance of this integration. Therefore, the conclusions do not discuss ICT in isolation, but discuss its role within the larger processes of the informal learning of advocacy groups.

ICT and Democracy: Wider, Deeper, Faster

The advocacy groups in the study were structured in informal, fluid, lateral networks that used democratic processes -- transparency, inclusion, diversity, and authenticity were valued. The openness and decentralization of such networks is similar to the structure of Internet, and Internet-based ICT appears to serve the needs of advocacy well. ICT allows advocacy groups to build wider networks, to collaboratively research and discuss advocacy issues, to more easily respond and adapt to change in their wider environment, to distribute information more widely and more efficiently, and to make their voice heard, even if ignored by formal systems.

On the other hand, ICT can as easily support exclusive groups of like-minded adults who control and distribute their message(s) from closed systems. The difference between such groups and informal advocate groups is the democratic structure and processes used by the latter. Examples from the study demonstrate the necessity of transparency, inclusion, diversity, and authenticity. Transparency and authenticity were key factors in establishing the trust so important for motivation and participation. Inclusion and diversity were processes that grounded informal advocacy work in what

was really happening in the community and ensured a range of feedback that built group knowledge and strengthened action.

ICT and Democracy: Access is critical

While advocacy groups use a variety of online and offline technology, it is clear that access to ICT and Internet is required to participate fully. In the ecology of the study -- a large, loose, lateral network of advocates -- core group participants had reliable Internet access; those without access were excluded or participated minimally. In small part, reported non-access to ICT was due to living in remote locations without infrastructure; in large part, non-access to ICT was due to conditions of poverty (e.g., lack of secure housing; the priority and demands of caring for a family with insufficient resources; the priority of physical and mental health issues, and lack of financial resources for non-essentials). Study findings described a stark contrast between advocates with easy, reliable access to the Internet at home, work, and through portable devices, and advocates with no access at home or work. The latter were restricted to access provided in the community or in formal systems such as schools. According to study participants, awareness and use of library community access was limited, and in the formal system of government, school and of official parent bodies, access was so controlled as to be almost useless. For those who had little or no control over their own access, the amount of effort required to use ICT was prohibitive.

The informal learning of advocacy groups integrates online ICT use and face-to-face and offline methods; it is not fully reliant on access to ICT. Nevertheless, as ICT increases the ability to have a voice and participate in democracy, barriers to ICT access create a serious exclusion. Increasingly, control of the Internet by corporate and

government interests is an issue under discussion by those advocating its democratic use and by informal learning and communication theorists.

Recommendations regarding access to ICT

Given the above, ways of improving access need to be addressed. Although considerable efforts have been put into providing access through the community (e.g., in public libraries and other community institutions), the access provided is too limited. The more people can control their own access, the more people can participate in democracy. Formal systems seeking participation from citizens, as, for example, the public education system purports to do, need to provide open access. Not only do such systems need to remove barriers currently in place, they need to help people overcome barriers by supporting informal learning of ICT and by facilitating connection and participation among diverse groups, especially marginalized groups.

ICT as a Tool for Advocates: Suggestions for Success

Advocates of the study found some success through orienting their work within informal systems. An understanding of this orientation, and the methods and strategies suited to it, provides a framework for advocacy. Study participants adhered to principles common to traditional participatory, dialogical learning groups: inclusiveness; embracing diversity; eliciting and sharing member knowledge; sharing decision-making; exploring through dialogue; and working toward action. Chapter 2 included a survey of "study circles", and study results identified participant use of strategies characteristic of such models. Current models can be referenced that provide a clear description of practice (e.g., www.studycircles.org).

Also, unexpected study findings include the following aspects of informal group sustainability: sustaining engagement; validating group identity; and evaluating credibility. The question of sustainability is important because informal systems lack set structure or are of shifting structure. The use of ICT by advocacy groups enables them to function in such contexts. Further, informal groups using Internet media for research and information are exposed to a flood of ambiguous information and can drift away from their important grounding in meaningful and relevant experience. Study findings explain how advocate groups counter alienation and sustain engagement.

Sustaining engagement. Commitment to the shared advocacy goal is the foundation and "glue" of informal advocacy group structure and process, therefore sustaining this commitment is crucial. Motivation to participate in advocacy is sustained by the meaningfulness of engagement and the perceived personal value of learning. In the study, individual advocacy was sparked by a powerful, personal awareness deeply grounded in the individual's experience -- advocates continued to refer to the formative event years after it occurred. Meaningfulness increased as learning continued to be integrated in the advocate's life and as the advocate contributed personal experience and knowledge. Face-to-face interaction is often the arena of life experience-- for this reason, face-to-face interaction continues an important role in the mix of online and offline technologies used in advocacy. Still, meaningful participation is greatly supported by ICT. Asynchronous text communication allows "spaciousness" for reflective participation. It also allows casual, responsive interaction that validates member contributions. For example, a primary use of email by study participants was to respond with acknowledgement, encouragement and feedback to contributing group members. Participation in informal

learning involves human interaction, builds relationships and connections and provides a sense of belonging -- all meaningful experience for the learner. Further, collaborative projects build common experiences that enable trust and add important "trusted nodes" to the learner's network.

Validating group identity. The loose, changing networks of informal groups lack set structure and protocol. In the study, the diverse membership struggled to develop accepted protocols, or "advocacy culture," through participation. A major concern of study advocates was the need to validate their group identity. The shared advocacy goal was a powerful unifier and touchstone for identity. In the case of the study participants, group purposes were regularly clarified and reiterated. As a result of using this strategy, advocates had a heightened awareness of the shared goal that served to focus internal work and provide a framework for understanding how the group fit in the wider network.

Advocates sought confirmation that their work was effective, and measured what Cross (2003) terms "the ability to contribute to and affect the life of communities in which we are a part" by developing evaluation systems that measured success of internal processes as well as eliciting feedback from the wider network. Feedback tools built into ICT assisted this process, and results of evaluation were used to inform practice. To reaffirm their credibility, advocates used ICT to retrieve, distribute, and archive summaries of successful action, as well as to contribute methodological explanations to the wider advocacy networks as models for action. Feedback and evaluation systems are critical to sustaining the identity so important to meaningful engagement.

Advocates experienced frustration at inequity, at not having an opportunity to voice opinion, and at not being listened to. These experiences had long-lasting resonance and

motivated advocates to build processes that were equitable, open, and inclusive. Ethical practice was an element of identity. For example, study participants frequently made critical comparison between informal group practice and opposing formal group practice that reinforced this element of identity.

Evaluating credibility. Advocates relied on ICT to access information and, faced with the flood of online information, study participants developed skills for identifying relevant and credible information. Advocates created, and recreated, criteria to measure the credibility of both the information they received, and the information they created and distributed. The conditions required to sustain engagement in advocacy also informed the criteria advocates applied to the value of information in terms of information to be selected and trusted. Measures affecting trust of information and communication included the degree to which the information is grounded in people's experience (reality); the degree of balance (diversity and representation); the degree of commonality (recognition); the degree of integration with other information (acceptability); and the degree of openness (transparency). Accordingly, advocates valued information and resources that were grounded real experience, representative, expressed in clear language, supported by reference to accepted knowledge, and provided in a transparent manner.

Recommendations regarding sustainability. The effort and importance given to group sustainability was an unexpected finding of this study and may constitute a model for successful informal learning groups. Given the above, informal learning groups can increase sustainability by using the following strategies:

- Valuing and eliciting group members' personal experience and knowledge;
- Practicing "spaciousness"--unhurried listening and reflective participation;

- Creating a casual and supportive culture of participation;
- Building trust through collaborative projects;
- Regularly clarifying and reiterating group goals;
- Developing and using critical feedback and evaluation systems;
- Using ethical practices;
- Creating and applying criteria for relevant and credible information.

ICT Use by Advocates: Implications for Informal Learning

Learner autonomy, i.e., control over what and how to learn, is a primary difference between informal and formal learning. The advocacy groups of the study were presented as informal learning groups. Their use of ICT facilitated the selection and generation of content (what they learned), and also supported their networks, participation, dialogue and action (how they learned).

Curriculum. A requirement of democratic participation is the ability of participants to decide what is important (Angus, 2001). In the study, Internet search engines, email communication, websites, and blogs assisted advocates in finding relevant information and developing knowledge about an issue that was not limited to mainstream media — the advocates' online network acted as a huge, diverse learning resource. Internet-based research tools such as Google connected them to relevant sources of information, widening their network of relationships. Relevant information was shared via email, listservs, websites, and blogs. Advocates also created their own content, using email and publishing tools for collaborative drafting of documents, newsletters, and online content for their websites, and as well as posting personal stories and opinions. ICT facilitated

"native reporting" and distribution of the authentic voice of people affected by the advocacy issue.

Networks. The wide networks were inclusive and diverse, consisted of both strong and weak connections, and were held together by the shared advocacy goal. Study participants related inclusion to "real," not "phony," representation that made a meaningful voice amidst the proliferation of standardized messages from formal systems. Also, the number and diversity of advocates affected the potency of learner-generated resources and the selection of relevant material by addressing different ways of experiencing the advocacy issue and by more effectively processing the increased amount, complexity, and ambiguity of information encountered in the network (Siemens, 2006).

Participation. Learning theorist J. Cross (2003) states that learning requires access and the opportunity to contribute, and notes that failure to learn is often the result of exclusion from participation. Menzies (2004) regards meaningful participation as an antidote to alienation caused by ICT -- yet ICT shows another face by strongly supporting meaningful participation. In the study, advocate control of ICT communication meant advocates chose if, when, and to what extent they participated. Motivation to participate came from commitment to further the advocacy work, but also from the perceived benefits of participation as a meaningful experience. To a much greater extent than face-to-face meetings and telephone, ICT supported quick, responsive processes that validated participation such as giving encouragement, acknowledgement, and feedback. ICT also lends itself to transparency and efficiency. For example, when collaboratively drafting documents, participating members could see all drafts and revisions through the copying

function of email. Asynchronous ICT facilitated "spaciousness" and reflective participation. Participation in open communication online requires trust. For advocacy groups, the shared goal is the first commonality that begins trust, and the common ground of shared experience and collaboration sustained trust and strengthened the network.

Dialogue. In the study, there was evidence of ICT creating "a meeting place" (Angus, 2001) where advocates could interact, share resources, discuss the advocacy issue, and plan action (Table 6) within their various networks. Advocates developed trust through participation, and engaged in meaningful, authentic dialogue in their "meeting place." However, there was marginal evidence of ICT supporting "a public space" for democratic, public discussion and debate — "a public space" where advocates interact with diverse others regarding the issue. For advocates, successful public dialogue is the validation of learner ideas and the beginning of change. In the study, achieving successful dialogue was challenging due to tension between informal and formal systems. Requirements for dialogue are openness, trust, and "a public space" -- a place of not only neutrality, but equality. Angus (2001) believes ICT can make effective "public spaces" for democratic discussion that have a wider impact than mainstream media, and that making spaces for authentic dialogue is an important role for informal social justice learning.

It is clear that the affordances of ICT fit well with the processes of informal learning. ICT supports open, lateral networks and eases communication, research, participation, and distribution of information. In the case of informal advocate groups, ICT allowed advocates with access to include and bring forward the diverse voices of those affected by the advocacy issue. Advocates with access were able to respond quickly

to change and to communicate widely and efficiently. The study participant, or informal learner, can be characterized as moving autonomously throughout a lateral network of connections and relevant resources, engaging in participation to a personally meaningful extent.

It is not clear that study conclusions have any implication for the use of ICT in formal education systems. The following example from the study results (advocates learning ICT) epitomizes the integrated and equitable nature of informal learning:

> The advocate network constituted a vast learning resource of instruction: providing information, models, and teachers. ICT tools and ICT knowledge were openly shared among network members. Study participants learned ICT adequately from peers, from observation, and by trial and error. They sought sufficient learning for the project at hand, and learned from anyone with sufficient knowledge. Often, the learning was applied immediately, and the result distributed back into the network. The study participants expressed satisfaction in their increased skill level and in the positive interaction that strengthened their connections within the network.

A comparison of the informal learning example above with a formal ICT course exposes major differences: the necessary learning was specified by the learner; the teachers were not experts; the extent of the learning was controlled by the learner; the evaluation consisted of meaningful application of learning. Also, the learning process was, at all stages, integrated in the learner's usual participation in the network. This integration was reflected in the following remark of a study participant expressing dismay at the number of formal technology courses being added to the public K-12 system: "Do we teach people to use a telephone?"

Recommendations for informal learning. Unstructured, informal learning is different from structured, formal learning -- different skills are required. Siemens (2005)

identified the following skills needed to learn in a rapidly changing environment overflowing with information:

- the ability to draw distinctions between important and unimportant information;
- the ability to recognize when new information alters the landscape.

Based on the findings of this study, four further skills are suggested as being very useful to informal learners, (but that may not be required by learners in formal education). They are as follows:

- the ability to make and maintain a variety of weak and strong connections;
- the ability to disclose personal learning processes to others;
- the ability to develop criteria for trustworthiness and apply them critically;
- the ability to listen with "spaciousness" and elicit meaningful feedback.

Strengths, weaknesses and limitations of the study

The strength of the study is its grounding in reality. Grounded theory method limits interpretation to study data. Although the study sample was small and specific to selected advocacy groups over a short period of time, the results are rich and authentic. Moreover, the study ecology is unique and previously undocumented. However, the study conclusions may have little pertinence or validity to formal education.

Suggestions for further studies

Based on what was found in this study, suggestions for future studies are as follows:

- The study described the limited success of participants' use of ICT in creating public debate. There is little research on the use of ICT to create "public spaces"

for dialogue, an important area of study in democratic societies. A study measuring change in barriers to use of ICT for open, public debate, or an exploration of successful use of ICT as "a public space" would add to knowledge of this area important to social justice.

- The analysis of email use (Figure 6; Table 6) indicated that the participants' communicative style may have affected the number and length of email messages sent. However, a detailed analysis of differences in individual usage patterns was not explored and may be an area for further study.
- Study participants used a limited range of ICT, and appeared satisfied to use only those affordances of the technology that met their immediate needs. The study showed learning ICT occurred through trial and error, by transferring skills from other areas, by learning from other members possessing sufficient technical knowledge, or by accessing resources in their advocate network, but not through formal technology instruction. Some educators, including Wenger (2005), stress the greater potential of ICT should be exploited through more expert facilitation of learning ICT – an area for further study.
- The study explored how ICT supported an advocacy voice for participatory informal groups in the ecology of a democracy in decline. How would this be different in a failed democracy or a non-democratic society?

Concluding Comments

This study of advocacy groups and their use of technologies in informal learning provides some insight into a largely unexplored area of research. Without access to ICT, it is unlikely that the social justice achievements of the study participants would have

been as extensive. Without access to ICT, the participation and engagement in advocacy by study participants would have been minimal. Informal learning processes integrating democratic values of openness, inclusion, and diversity supported successful learning in a context of loose, lateral, changing networks. Increasing access to ICT and increasing support for informal learning would increase participation in democracy and reverse the current trend.

Researcher Comment

The literature reviewed in this study names grand old fighters of the past -- Coady, Freire, Horton, Thomson -- and respects these educators decades after their practice. Social justice learning occurs in the informal system--be assured that there were countless women and men whose informal work was not validated and commemorated in formal archives or texts. They remain beloved and respected in family histories, popular stories and art, and the resonance of their successful participatory action continues. Today, also, there exists widespread, informal participation in working for social justice -- activity largely unmeasured, unseen, and ignored by mass media, formal institutions and governments. Since the data collection period of this study, the participant groups have variously changed shape, dissolved and assembled into different groups, in a continual and increasing flow of participation. The women and men of the study who are using ICT to support their advocacy -- “like water flowing around rock”-- represent a tiny fraction of the current human impulse to connect in groups to change the environment. After all, what can be more typically human than a group of people getting together, talking about something that’s got their backs up, and then doing something about the problem?

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APPENDIX A: ATHABASCA UNIVERSITY RESEARCH ETHICS BOARD

MEMORANDUM

DATE: July 6, 2005

TO: Patricia Fahrni

COPY: Dr. Susan Moisey (Supervisor)

FROM: Janice Green, Secretary, Research Ethics Board

SUBJECT: **Ethics Proposal #05-20 "The Ability to Act: Advocacy Groups and Their Use of Technology in Informal Learning"**

The Athabasca University Research Ethics Board reviewed the above-noted proposal and supporting documentation, and I am pleased to advise that it has been awarded **FULL APPROVAL** on ethical grounds.

The approval for the study "as presented" in revised documents furnished to file on June 29, 2005, is valid for a period of one year. If required, an extension must be sought in writing prior to the expiry of the existing approval. **A Final Report is to be submitted when the research project is completed**. The reporting form can be found online at http://www.athabascau.ca/research/ethics/.

As you progress with implementation of the proposal, if you need to make any changes or modifications please forward this information to the Research Ethics Board Chair via Janice Green, the REB Secretary.

IF YOU HAVE ANY QUESTIONS, PLEASE DO NOT HESITATE TO CONTACT JANICEG@ATHABASCAU.CA.

APPENDIX B: SAMPLE LETTER OF CONSENT - INTERVIEW

Project: The Ability to Act: Advocacy Groups and Their Use of Technology in Informal Learning

Researcher: Patricia Fahrni, Graduate Student, Athabasca University

EMAIL pfahrni@shaw.ca ,TEL -

Project Supervisor: Susan D. Moisey, Ph.D., Associate Professor, Master of Distance Education Program, Athabasca University
EMAIL susanh@athabascau.ca TEL -

You have been invited to participate in an exploratory study of the advocacy groups' use of information and communication technology in informal learning. Participation is voluntary.

- Over a period of two months, you will participate in two face to face interviews of one to one and a half hours at a time convenient to you.
- Interviews will be taped and transcribed. You are welcome to request to review the transcript of your interview(s).
- Data will be analyzed using grounded theory analysis. The results of the study will be published as a thesis in the Master of Distance Education Program, Athabasca University, and will likely be used in educational writing and/or conference presentations as well. You can request a digital copy of the results from the researcher.
- Interview tapes, observational notes and transcripts will be kept by the researcher in hard copy or digital form on CD storage for a period of five years and then destroyed.

Privacy, Confidentiality and Anonymity:

All information will be held confidential, except when legislation or a professional code of conduct requires that it be reported. To protect your anonymity, you will be issued a pseudonym.I will also adopt a pseudonym for your group.

Consent:

I have read and understood the information contained in this letter and I agree to participate in the study, on the understanding that I may refuse to answer certain questions, and I may withdraw during the data collection period.

Date:_____

Signature: _____

Print name: _____

APPENDIX C: SAMPLE LETTER OF CONSENT - OBSERVATION

Project: The Ability to Act: Advocacy Groups and Their Use of Technology in Informal Learning

Researcher: Patricia Fahrni, Graduate Student, Athabasca University

EMAIL pfahrni@shaw.ca , TEL -

Project Supervisor: Susan D. Moisey, Ph.D., Associate Professor, Master of Distance Education Program, Athabasca University

EMAIL susanh@athabascau.ca , TEL -

You have been invited to participate in an exploratory study of the advocacy groups' use of information and communication technology in informal learning. Participation is voluntary.

- Over a period of several weeks between now and the start of the K12 school year, the researcher will observe how technology is used in the naturally occurring activity of your advocacy group. Observational notes will be recorded. Group archival documents such as minutes, memos and communication transcripts will be requested.
- Data will be analyzed using grounded theory analysis. The results of the study will be published as a thesis in the Master of Distance Education Program, Athabasca University, and will likely be used in educational writing and/or conference presentations as well. You can request a digital copy of the results from the researcher.
- Interview tapes, observational notes, archival documents and transcripts will be kept by the researcher in hard copy or digital form on CD storage for a period of five years and then destroyed.

Privacy, Confidentiality and Anonymity:

All information will be held confidential, except when legislation or a professional code of conduct requires that it be reported. To protect your anonymity, you will be issued a pseudonym. I will also adopt a pseudonym for your group.

Consent:

I have read and understood the information contained in this letter and I agree to participate in the study, on the understanding that I may refuse to answer certain questions, and I may withdraw during the data collection period.

Date:_____

Signature: _____

Print name: _____

APPENDIX D: INTERVIEW PROTOCOL AND INSTRUMENT

Interview protocol

> Preamble: I'm Patricia Fahrni and I am studying advocacy groups' use of technology for my thesis: Masters in Distance Education, Athabasca University. There is little information regarding the use of technology in informal groups, and I am very interested in your experience.
>
> I will ask questions about how you use email, listservs, websites, and any other technology in your group. (Provide Visual 1: definition list.) You can choose not to answer a question or stop the interview at any time.
>
> In the interview, if you refer to other members of the group don't use their names, but just use general terms, e.g. "the woman who organises the email lists."
>
> I'll be taping the interview as I will later make a transcript so I can analyse the information. (By the way, I will keep the tapes and interview transcript for five years and then they will be destroyed. I won't give others access to them without your consent.) Do you have any questions about the process?

Questions:

Context

How/when did your group start?

Could you describe the goals of your group?

Could you describe your group's main successes ?

Could you describe your group's main challenges?

Relationship networks

How many people are in your group?

What kind of structure do you use? (Show Visual 2. Elicit diagram of structure.)

Overview: How do you do your work?

Technology access

What technology do you use: Checklist: F2F, phone, phone conference, fax, post; INTERNET: email, VOIP, audioconferences, videoconferences, website, weblog, wiki, RSS, ezine, other.

How did you become aware of the technology?

How did you get the technology?

Technology skill development

In your group, who uses the technology? (Identify technology users on diagram.)

How did you learn to use the technology?

Have you changed the way you use the technology?

Functions served by technology

How do you communicate internally? (Add connections to diagram.)

How do you know group members are heard?

How do you communicate externally? (Add to diagram.)

How do you know people have heard you?

How do you get feedback on what you are doing?

How do you know your processes are working?

Successes and challenges

What technology has helped most in your successes?

What needs are not met by technology?

What technology would help most? Can you access it?

Interventions and strategies

How have you changed technology use since you started?

How will you change technology use in the future?

Is there anything else you wish to add to this interview?

Closing: Thanks for giving me your time for this interview.

Do you have any questions or concerns about the process?

Do you have any suggestions for how I could improve the experience for the interview participant?

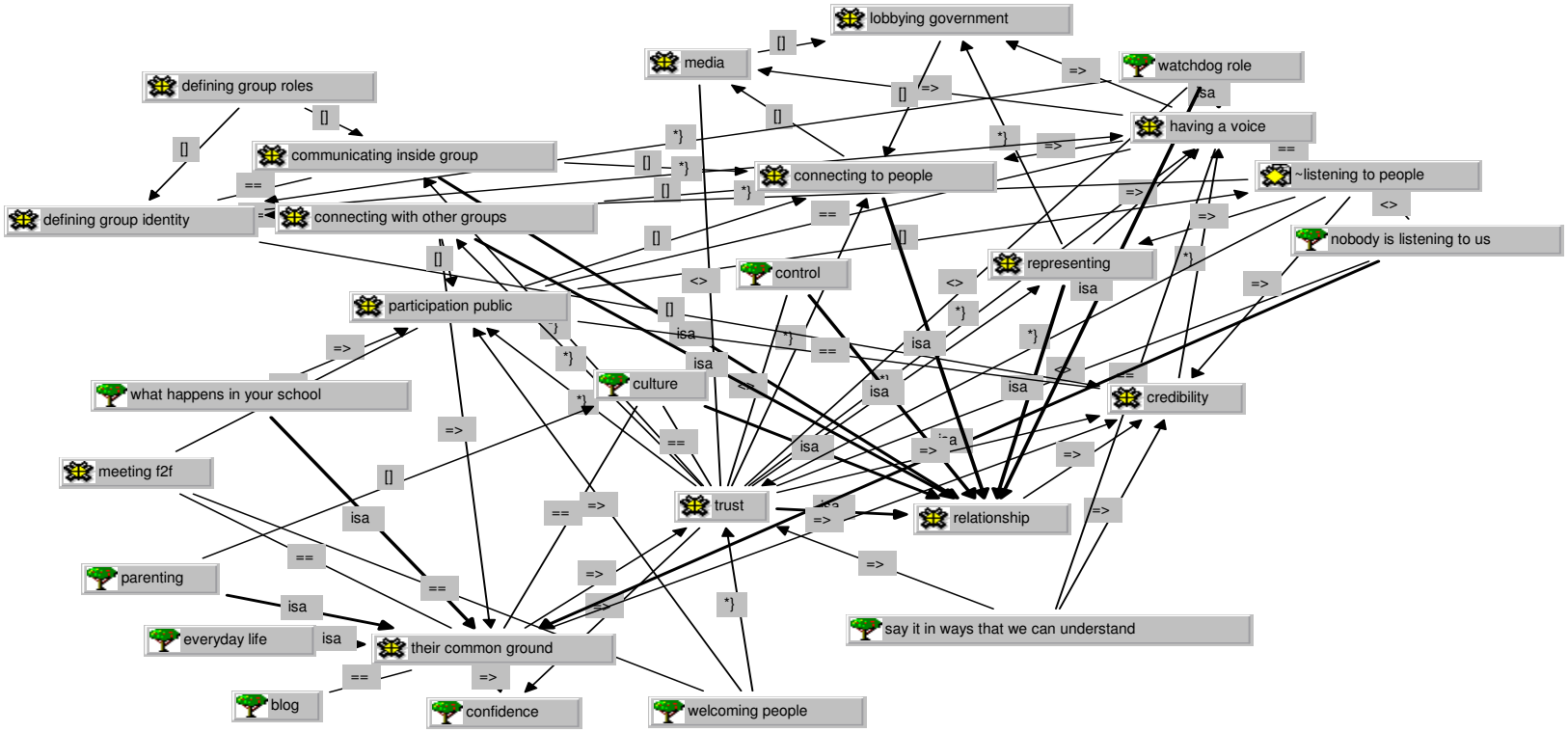
Would you like to have a copy of the interview transcript when it's ready?

I originally asked that you give permission for two interviews. I may request a second interview in about __weeks. In the case that I require a second interview, how would you like me to contact you?

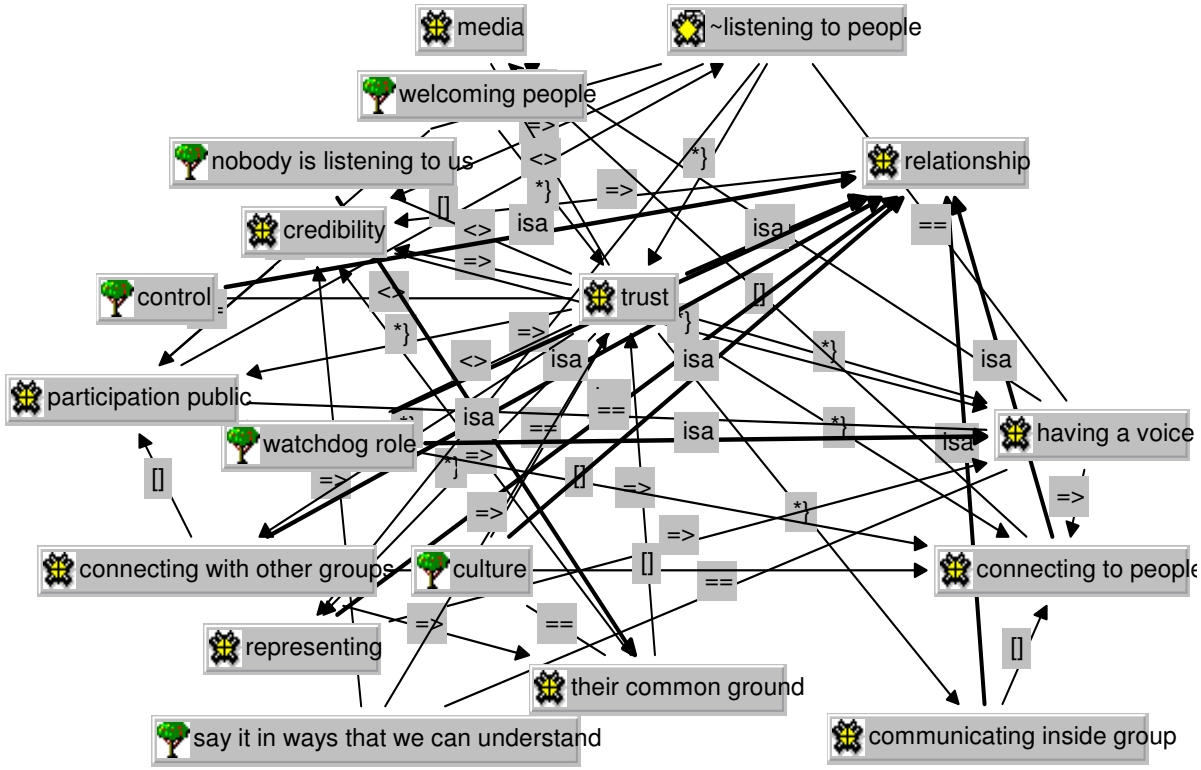
END OF INTERVIEW

APPENDIX E: ATLASTI OUTPUTS

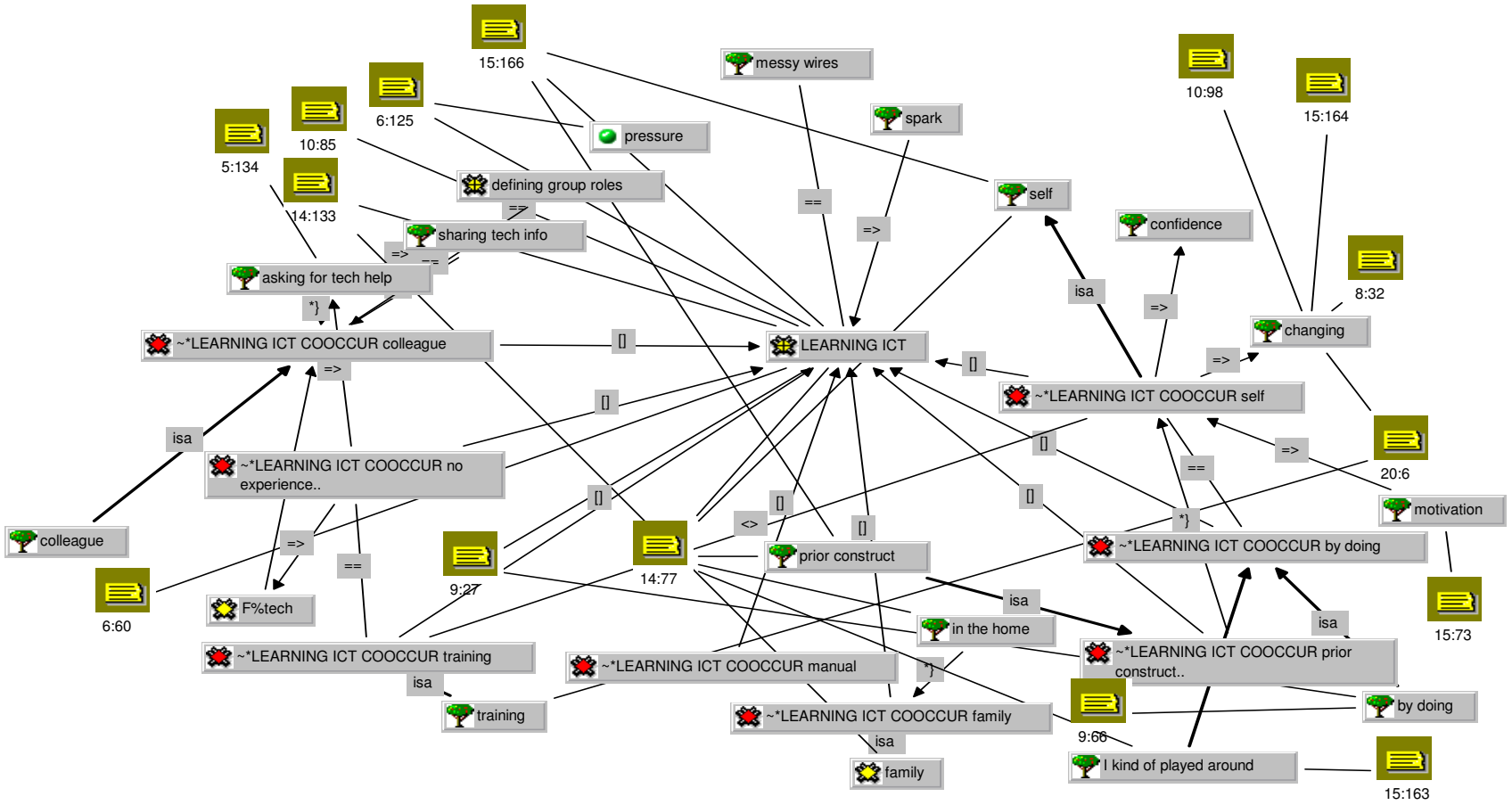
E1 - AtlasTI Network View Showing RELATIONSHIPS



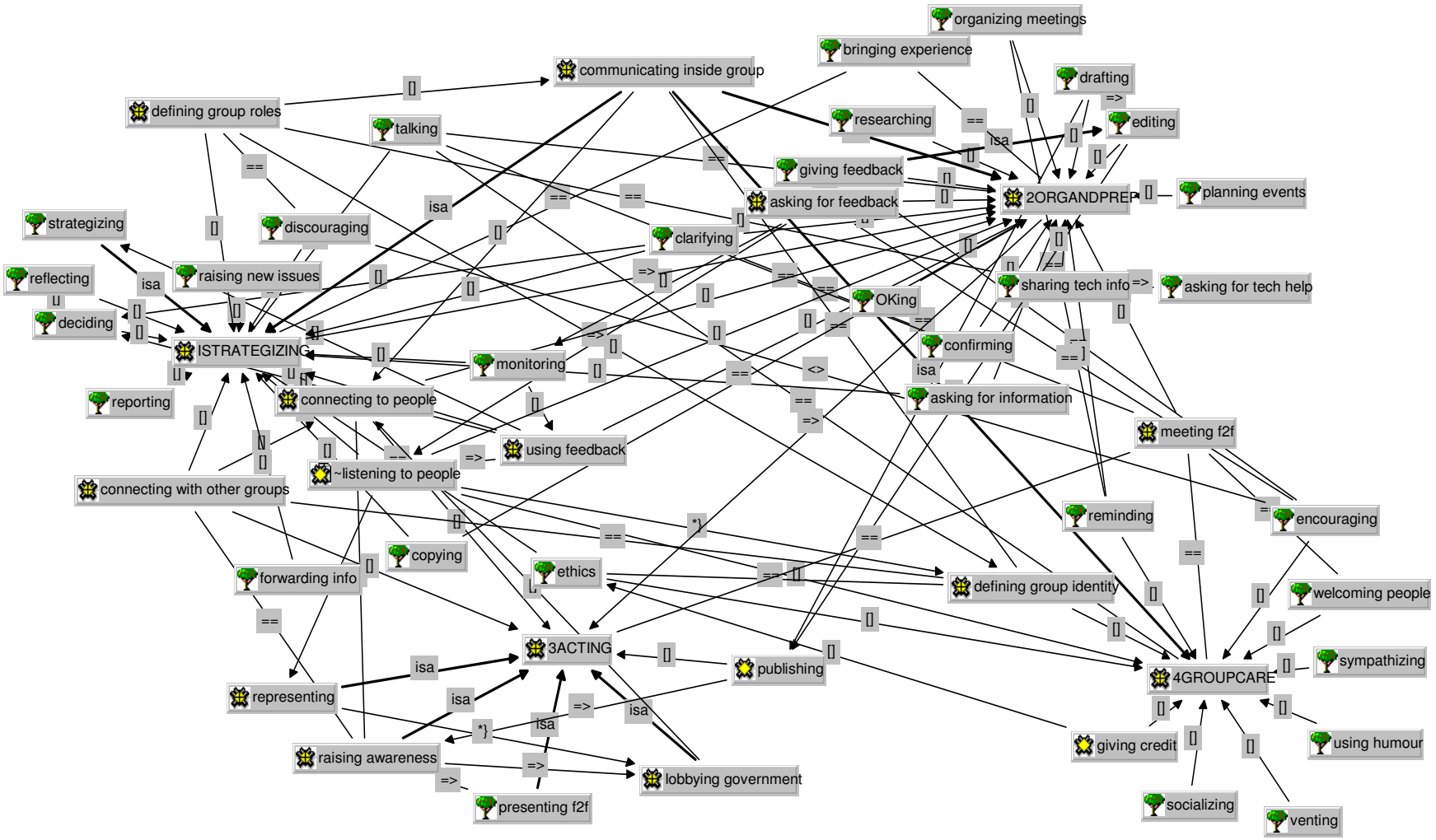
E2 - Based on AtlasTI Network View Showing RELATIONSHIPS: A Focused Network View Centering on Trust



E3 - AtlasTI Network View Showing LEARNING ICT



E4 - AtlasTI Network View Showing FUNCTIONS



E5 - AtlasTI Code Family FUNCTIONS Code list

E5 - HU: ADVOCACY

File: [C:\Program Files\Scientific Software\ATLASti\TEXTBANK\ADVOCACY]
Edited by: Super
Date/Time: 10/10/06 01:28:10 PM

Code-Filter: Code Family FUNCTIONS
---!

forwarding info
strategizing
encouraging
reporting
organizing meetings
connecting with other groups
asking for feedback
connecting to people
drafting
confirming
talking
researching
giving feedback
editing
asking for information
OKing
sharing tech info
reflecting
listening to people
raising awareness
using humour
representing
defining group roles
raising new issues
bringing experience
meeting f2f
defining group identity
presenting f2f
planning events
lobbying government
copying
communicating inside group
ethics
socializing
using feedback
giving credit
publishing
welcoming people
discouraging
clarifying
monitoring
asking for tech help
venting
sympathizing
reminding
deciding