**International Students' Lived Experiences Seeking ICT Assistance:**
**<u>Just Click Here</u>**

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**Abstract**

This thesis explores the lived meaning of requiring, requesting and receiving information and communications technology (ICT) assistance for international students with limited or no background with ICT.   The anecdotes and reflections shared by the participants delve into a range of feelings, from uncertainty, distress and condescension to fascination, determination and affirmation.  They reach into places where the participants built their sense of competence and potential with and through ICT and felt indebted to their help providers in the process.  The participants' help seeking with ICT emerged as being a self-conscious search for discrete, non-judgmental, patient demonstration and guided practice, reliant upon the formation of reciprocal, helping relations with others. As a phenomenological study involving 10 participants, analysis sought for depth of meaning, contemplated in relation to philosophy, literature, art and personal experience. The theme of being lost in the logic of ICT and the maze of help seeking in a foreign environment emerge as a potent metaphor to guide tactful ICT help provision in diverse, post-secondary institutions marked by ubiquitous ICT integration.

*Keywords: international students, information and communications technology, phenomenology, philosophy of technology, instructional design, learning communities*

**Acknowledgements**

# Table of Contents

## Chapter 1:
## Setting the Phenomenological Question

> *Presently he said, "But I was thinking…when I was*
> *worshipping, or whatever, what I was thinking, was about the*
> *dirt." He picked up a palmful of the crumbly, dark floodplain soil,*
> *and let it fall from his hand, watching it fall. "I was thinking that if*
> *I could, I'd get up and dance on it…Dance for me," he said, "will*
> *you, Hsing?"*
> *She sat a moment, then stood up – it was a hard push up off*
> *the low berm, her own knees were not so good these days – and*
> *stood still.*
> *"I feel stupid," she said.*
> *- Ursula LeGuin, "Paradises Lost"*
> *in <u>Birthday of the World and Other Stories</u> , p. 362*

She entered the computer lab unassumingly, seated herself at a computer station and shifted her bewildered gaze back and forth between the computer screen and her stack of papers. It was my job at that time to work with the lab supervisor to design an ICT training program. Observing and speaking with students in the lab was part of my needs analysis. I introduced myself to the student, asked her what she was trying to do and offered my assistance. Through my questioning, I learned she was a mature, newly arrived, international student from East Africa who had an assignment to complete involving a computer program she had never used before. I sat down beside her and began to help, my first directive being to use the mouse to click on the relevant program icon. To my surprise, I soon discovered that the student was uncertain how to manipulate a mouse and that the phrase, "just click here", had little meaning to her.

It may be difficult to comprehend how, in today's day and age where the global digital divide is gradually diminishing (ITU-D, 2010), this student had managed to make

it to Canada as an undergraduate student with only basic knowledge about word

processing and how to use a mouse.  Indeed, as a help provider, identifying with those

who lack general knowledge and experience in using information and communications

technology (ICT) for personal and academic purposes may be more a matter of

inexperience than assumption.  For most of us who work in a technology rich, post-

secondary institution, we may simply have never lived in a world without ease of access

to ICT, where computer applications and the Internet have not played a dominant role.  In

*Technology and the Lifeworld: From garden to earth*, Don Ihde (1990) described such

inexperience as being rooted in our allegorical shift from the innocence and paradise of

Eden to our individual and collective *lifeworld shape*.  This is experienced as the social,

cultural and natural environment in which we live, inclusive of the technological tools

that are shaped by us and, by extension, that shape our lived experiences.  In this

perspective, the lived meaning of studying and working in a university setting marked by

ubiquitous ICT integration is ultimately interpersonal and interactive in nature.  The

following three anecdotes from participants in this study reveal the nuances of frustration

and self-consciousness associated with adapting to such an ICT enriched learning

environment.

> What is called a cut and paste, pagination? I had no idea. So it took me very long,
> long, long time to have one little paper done. I remember one time we were 8 to 6,
> one of the courses, 8 to 6. […] And it was about law in education, safety laws for
> teachers. And all that they required of us was to cut and paste on the various
> topics and I didn't know how to do it.  So I spent one week typing everything out.
> Then we came to class and I saw how somebody had done his thing very neatly.
> And I said, "How do you do this?"  So, you just cut and paste.  And man you
> know I went back home that evening and in one and a half hours I did all that I
> did for one whole week.  So, it was quite a lot of time I spent on one little thing.
> - Leo

> Kathy asked us to do our class presentation in MS Publisher.  Oh my goodness!  What is MS Publisher?  I didn't know this! [...]  [W]hat should I do?  How can I do? I didn't know anything.  […] [I]n our cohort, nobody knows actually MS Publisher.  […] Ferdinand was asking me, "Abul, do you know this MS Publisher?" I said, "Yeah, I don't know. But I think it's not a problem."  And he asked me, "Why?"  I said, "Oh, I know Sarah knows this."  Because Sarah is one of our PhD students, you know.  She is one year ahead, so she passed through these things.  […] I have seen her using that MS Publisher.  So, I know that she uses that one.  So, I know where I can get help.  And that feeling, you know is bit different than when you don't know where to get help. […] Actually that give me nervousness as well if I see that, "Oh well, I am not getting help".  And, I don't know where to get help.  That give me like helplessness and also nervousness.
>
>                                                                          - Abul
>
> [I]t's also like a personal thing when you don't understand something.  You ask the first time, and somebody tries and shows, and then you ask the second time and they show you the same thing.  When you ask the third time, I mean, like, the person will be angry by then, like, "What? Are you stupid or something?"
>
>                                                                          - Aline

These are only a small sample of the anecdotes and reflections shared by the participants in this study.  Yet, their emotions and relations surface, from feelings of wasted time and helplessness to nervousness and uncertainty.  According to van Manen's (1990) human science research terminology, these anecdotes contain essences of the *lived body*, *lived time*, *lived space* and *lived relations* of the participants' ICT help seeking experiences.

In *Paradises Lost*, Ursula Leguin (2002) takes her readers on a journey through time and space aboard an intergalactic ship transporting a large community of settlers to another planet.  The distinctive aspect of the story is that the ship travels through space in real time, and thus generations of families live and die in a highly technological, human-made environment, including a regulated interaction with organic matter.  The story culminates in a crisis upon reaching their final destination.  A group of shipmates denounce the intended purpose of their journey, extolling the virtues of remaining in what they feel is a life of purity on the ship itself.  Arguments break out and a division emerges

between those who want to leave the ship and settle on the planet and those who want to stay on board and continue their travel in space, indefinitely abrogating a terrestrial life. Upon landing on their new earth-like home, the abandoned settlers must make use of the knowledge and skills they gained through their formal and informal educational experiences aboard the ship, from reading historical documents and taking exams to working and playing in expansive greenhouses. Yet, they soon realize that their learning hasn't fully prepared them for the rigours of a life outside the accustomed lifeworld shape of their spaceship. In the closing paragraphs, the group leader and one of the chief scientists, Hsing, is sitting with her husband on a riverbank when her husband asks her if they might dance together, barefoot. She agrees hesitantly yet expectantly, and speaks her timidity and uncertainty when taking her first steps with these simple, yet revealing words, "I feel stupid".

The lived meaning of such an act for Hsing is unique to her fantastical, lived experience as a resettled, space voyager. And yet, her self-consciousness and vulnerability in doing something new and potentially embarrassing resonates at many levels. As shared in the previous anecdotes, Aline's fear of looking stupid when seeking for ICT assistance is an example of such resonance. The participants described experiencing the opposite of LeGuin's science fiction narrative as they moved from a place where ICT was on the margins of their lifeworld. They had to adapt to a university learning environment where the use of ICT was central to their success. However, as LeGuin depicts in her story, the lived meaning of moving from one lifeworld shape to another cannot be constrained by a materialist, technological teleology. No matter the

type of technologies involved, nor the level of prominence they play, the lived meaning

of seeking ICT help is not limited to the technology itself.

A few years ago, I viewed art works by Kiyoko Kato as part of a Mendel Art

Gallery exhibition in Saskatoon, entitled *Flatlanders: Saskatchewan Artists on the*

*Horizon*. Kiyoko is a second generation Japanese Canadian artist whose work blends

traditional Japanese laquerware with the design patterns common in IT and engineering.

In the pieces I saw, she transformed the traditional dishware of Japanese culture into a

large canvas, with large rectangular piece of smooth, opaque yellow and green lacquer

overlaying what appears to be a sketch of the silicon lines of a computer motherboard or

the architectural blueprint of an airport. Kiyoko describes her work as always being in

progress, always changing, always transforming as she herself transforms as a human

being engaging in and with the world around her.

> People will see many different things looking at Kato's work: depth and surface,
> nature and technology, or, even more specifically, fields of wheat on a summer
> day or Osaka airport from above. Kato names her paintings only after the long
> "conversation" of making them, which can endure a year or more. "When I make
> the paintings, I talk to them, and they talk back to me, and very slowly I am able
> to organize them," she says. "Then, when they are done, we continue to have a
> conversation. I could re-title my works every week because I am always seeing
> something new." (Budney, 2008, p. 25)

One's transformation of ideas, emotions, and lived experiences is made evident to

ourselves and others through the act of creation, whether through art, dance or a piece of

academic writing. Through her blending of mediums and designs, Kiyoko finds

expression for her constantly evolving sense of self, art and of her place in the lifeworld

around her, including her relations with technology. Through the scientist's first steps in

her barefoot dance upon the sand, LeGuin depicts the transformation of hopes and fears

into a celebration of a life closer to nature. And, it is in the utilization of an English

language word processing program that an international student at an Anglophone, Canadian post-secondary institution is able to express his or her transformation of readings, lectures, discussions, experiments and community-based learning into an expression of his or her knowledge and skills.

While such transformation may be strictly seen as an end result, and usually is in higher education settings – i.e. the artwork, the dance piece, the essay itself – it is the process of creation that constitutes the lived experience.  In the context of international students with limited or no ICT background, the process of completing an assignment using a word processing, spreadsheet or presentation software program may indeed eclipse what knowledge and skills they possess of the subject matter.  Their end result (i.e. their essay or lab report) may only partially represent their competencies, with ICT obscuring their ability to show their understanding to others.  For such students, to overcome their challenge with ICT is thus not only a utilitarian matter of leveraging ICT to transform their knowledge and skills into tangible products to be assessed by their professors.  It is also a lived experience of adapting to the lifeworld of a Canadian post-second setting, in which a relatively high level of knowledge and skills with ICT are required in order to be successful.

With this in mind, we come to the general question for this thesis: *What does it feel like for international students with limited or no background with ICT to study in a post secondary learning environment marked by ubiquitous ICT integration?*  While this question provides a guiding direction for this thesis, it must be qualified.  Studying in a post-secondary institution can include many different lived experiences, from completing assignments to communicating with professors, to registering for courses.  Indeed, the

number of potential lived experiences could be so extensive that this question could lead

to a series of ICT usability tests.  With this in mind, the lived experience of ICT help

seeking provides a distinct area of focus as it crosses the boundaries of potential post-

secondary institutional contexts in which ICT may be required or used.  Thus, this thesis

question can be rephrased as,

> *What is it like for international students with limited or no background with ICT to require, request and receive ICT assistance in a post-secondary setting marked by ubiquitous ICT integration?*

From a pedagogical perspective, this thesis also poses follow-up questions.

> *What are the pedagogical issues and consequences for teaching and learning in an ICT enriched, socio-culturally and socio-economically diverse post-secondary learning environment?*

> *What is helpful advice for ICT help providers to support the academic and personal success of international students with limited or no knowledge and skills with ICT?*

The ICT focus of these questions may seem interchangeable with other

phenomena that are part of the lived meaning of being an international newcomer in a

post-secondary setting.  Indeed, many international students arrive in Canada with a sense

of purpose and self-confidence in their studies and are soon faced with the lived

experience of struggling socially and academically (Curry, 2004; Halic, Greenburg &

Paulus, 2009; Smith & Wolf-Wendel, 2005; Trice, 2004; Wang, 2004). Empirical studies

have suggested that while international students are generally satisfied with their

education in Canada, many of their pre-arrival expectations are not met (CBIE, 2009;

Madgett & Belanger, 2008).   The potential impact of such findings are considerable for

the 6.5 billion dollar industry of international education in Canada, with over 175,000

international students attending Canadian post-secondary institutions in 2008 (Kunin &

Associates, 2009).  The economic, moral and academic imperatives of international

education each bring their own set of issues and challenges in our current free market,

competition-focused era (de Wit, 2002; Madgett & Belanger, 2008; Fortin, 2001).  From

leveraging the international student market to offset decreasing domestic enrolment

figures, to pursuing a comprehensive policy of global citizenship education, the

intentions and purposes of international education are many and sometimes even

contradictory (Fortin, 2001).   However, it is clear that the value of increasing

international student enrolment in Canadian post-secondary institutions comes with a

price of its own. International education requires an institutional commitment to address

the needs of a socio-economically and socio-culturally diverse student body (Dobbert,

1998; Milem, Chang & Antonio, 2005).

This commitment has been shown to be successful in situations where

international students are meaningfully and intentionally integrated into the academic and

student life of the institution.  An example of this is in the emerging best practice of

*learning communities*, which can take many different forms, from comprehensive first-

year academic cohort models to smaller extra-curricular first year student transition

groups (Gabelnick, MacGregor, Matthews & Leigh Smith, 1990; Laufgraben, 2005;

Petschauer & Wallace, 2005).   In a cross-cultural learning community, for example,

international and domestic students are given opportunities for increased cross-cultural

understanding through engaging in social activities and helping one another personally

and academically (Hlyva & Schuh, 2004).  However, merely having opportunities to

interact across cultures does not promise increased cross-cultural understanding.

Increasing mutual, respectful, and enriching interaction requires guidance and structured

activities to promote the development of cross-cultural competencies (Chapdelaine & Alexitch, 2004; Pope, Miklitsch & Weigand, 2005; Wang, 2004). New student orientation requires focused attention on providing opportunities for socialization with senior students, discussions on cross-cultural competencies, and sessions related to academic induction (Abel, 2002; Madgett & Belanger, 2008; Pope, Miklitsch & Weigand, 2005).   The involvement of student peers and mentorship models, such as peer-to-peer advising and support, is another growing best practice.  The scope of institutionalized peer support should range from academic to health issues, including issues related to ICT support, according to the experience of successful universities (Kuh, Kinzie, Shuh, Whitt & Associates, 2005).  According to Chickering and Reiser's (1993) analysis of research in teaching and learning in higher education, accessible and meaningful student-faculty and student-student interaction and integrated, multidisciplinary and experiential curricular approaches play critical roles in creating conditions for optimal student learning and development.  This includes integrating an integrated, problem-based learning model to help develop students' ICT skills (Hung, Tan & Koh, 2006).  The argument has thus been made that internationalization requires a rethinking of many things, from teaching and assessment to cross-cultural sensitization and training (Dobbert, 1998; Milem, Chang & Antonio, 2005).

Ultimately, developments such as these require a collaborative engagement at the institutional level between academic and administrative units, based upon shared goals and outcomes (Kuh, Kinzie, Shuh, Whitt & Associates, 2005; Schroeder, 1999). In the context of international education, such institutional reflection and change are critical for long-term sustainability.  Inaction is neither reasonable nor productive.  If the needs of

international students in Canada are not met, especially those whose first language is not

English, the cross-cultural and linguistic challenges they face can lead to poor retention

rates (Madgett & Belanger, 2008).   The best international recruitment efforts are futile if

international students within an institution leave one or two years after arrival.

The effects of not being intentional in supporting the needs of an international

student body have been shown to be significant, from poor self-esteem to academic

difficulties and segregation within their own linguistic and cultural groups (Halic,

Greenberg & Paulus, 2009; Myer, Qian & Cheng, 2002; Trice, 2004; Volet & Ang,

1998).   International students may experience feelings of being misunderstood,

stereotyped, discriminated against, marginalized or considered academically inferior in

learning environments where the cross-cultural implications of advising, teaching and

learning policies and practices have not been thoroughly considered (Hinchcliff-Pelias &

Greer, 2004; Hlyva & Schuh, 2004; Lee & Rice, 2007).   Differences in lifestyle and

approach to academic study have been identified as creating perceived barriers between

international students and their domestic peers, who may have greater work and family

commitments and have a more individualistic perspective on their assignments, including

group work (Paulus, Bichelmeyer, Malopinsky, Pereira & Rastogi, 2005).  While in some

contexts ICT can improve learning outcomes for international students, such as using the

library (Hurley, Hegarty & Bolger, 2006) and writing skills development (Liu, Moore,

Graham & Lee, 2002), barriers in using communications technologies, such as online

discussion forums, have been shown to be linguistically challenging or socio-culturally

demanding (Liu, Moore, Graham & Lee, 2002; Philson, 1998; Schallert, Reed, & D-

Team, 2004).

When international students experience such difficulties, assumptions about how and from whom they will seek help have led in some cases to institutional misalignment of student support services (Volet & Karabenick, 2006; Pope, Miklitsch & Weigand, 2005).  International students may develop their own support networks outside of the formalized or traditional help provision services and outside the explicit or implicit help seeking practices and expectations of the institution (Volet & Karabenick, 2006).  This may be because of differences in attitudes and cultural perceptions of counseling support (Frey & Roysircar, 2006) or due to perceived cross-cultural and linguistic barriers and self-consciousness in asking for help from domestic students (Chapdelaine & Alexitch, 2004; Halic, Greenberg & Paulus, 2009; Trice, 2004;). Research has shown a tendency and/or preference for international students to seek help from their co-nationals or from their international peers, particularly where no intentional strategies have been implemented to create meaningful connections between international and domestic students (Volet & Karabenick, 2006; Chapdelaine & Alexitch, 2004).

The emphasis on international growth in post secondary education has invariably generated more research with international students, especially non-native English speaking students (Cheng, Myles and Curis, 2004).   This research has focused largely on linguistic, academic and cross-cultural issues, with minimal reference to how international students experience using ICT as part of their new learning environment. As Adamy (2001) broadly stated, research in educational technology must delve deeper into how ICT contributes "to the variety of experiences available to students", and ask, "[W]hat type of experiences does it help create that could not exist without it?" (p.209). This statement complements Volet and Karabenick's (2006) statement that, in the context

of greater cultural diversity on campuses, there is a need to seek a thicker

conceptualization and understanding of the situated, sociocultural factors involved in help

seeking in academic settings.  They write,

> Understanding the role of cultural dimensions in relation to students' intentions or
> reluctance to seek help as a function of peers' cultural-related characteristics is
> critical for designing learning environments that are more inclusive of all
> students, and in the context of international education, for promoting
> opportunities for intercultural learning, especially for students from monocultural,
> monolingual backgrounds.  (Volet & Karabenick, 2006, p.144)

Volet and Karabenick (2006) brought forward the numerous ways in which

international students may experience help seeking, based upon their own cultural

background and the learning context in which they seek help.  It would be questionable to

create a cultural compendium of help seeking styles in a typical Canadian medical-

doctoral institution, where there may be students from over 100 different countries, and

generational and ethno-cultural differences within nationalities.  Not surprisingly, Volet

and Karabenick (2006) emphasized the role of cultural dimensions over cultural

differences and focused upon the pedagogical implications of such findings in the

creation of a more inclusive learning environment.

The next five chapters of this thesis draw on a phenomenological methodology

and philosophical perspective to explore this issue of help seeking for international

students, with ICT as the focus.  Chapter Two provides a synthesis of the

phenomenological writings in the philosophy of technology, communication and action

that, through an iterative research process, came to underlie the interpretive lens of the

thesis. Chapter Three describes the methodology used for this study, including an

explanation of phenomenological research within the qualitative research spectrum, a

description of the research methods used and a description of the participants in the

study.     Chapters Four and Five present the analysis of results from the study: Chapter

Four focusing on the lived experience of requesting ICT assistance and Chapter Five

focusing on the lived experience of requiring and receiving ICT assistance.  Chapter Six

discusses the results of the research in relation to the pedagogical issues and

consequences raised for teaching and learning and helpful advice that emerge for student

support professionals, administrators and faculty/instructors in post-secondary settings.

This thesis works from the premise that adapting institutional practices to support

a diverse international student body is, above all, experiential in nature. It is lived through

interactions between international students, domestic students, staff and faculty, in the

academic and social activities common to post-secondary educational settings.   As with

the international student I sought to help in the computer lab, such a commitment can

have a multi-layered lived meaning, manifest in the simple, yet significant utterance of

something as seemingly ordinary as, "Just click here".    Surely enough, while in such a

situation, all that may truly be required is a click on a certain link or menu item, there is

much more to know behind what is clicked and why. However, this phrase is often

accompanied with others in a similar vein, such as "Don't worry, it's really easy" or

"This program is pretty straightforward" or "Just play around a bit".  While the intentions

behind such statements are usually well-meaning, they assume a great deal and put the

onus on an international student asking the question to see the task as easy, logical or

game-like: relations with the technology and with others that may or may not resonate

nor be at all relevant.  Guidance such as this could disregard the uniqueness of the

international student's lived experience with technology and the complex academic,

social and cultural context in which they experience its integration.  Ultimately, such

guidance can lack what van Manen (1997) terms *pedagogical thoughtfulness*, undermining the depth and breadth of need required of those asking for ICT help.  From a pedagogically thoughtful perspective, the superficial banality of such phrases as "Just click here" and "Don't worry, it's easy" can be recast as having implications not only in the realm of ICT support for international students. As both Adamy (2001) and Ang and Karabenick (2006) recommended, such interactions must be seen in relation to the design of post-secondary learning environments.

     As will be seen in the findings of this research, this study's instructional design implications do not lie not within the lived meaning of learning new computer skills and applications.  They delve into the place where an international student, like Leguin's character, Hsing, must face her self-consciousness and uncertainty.  They reach into the place where, like Kato's artistic blending of tradition and lived experience, an international student transforms his ideas and builds his sense of competence and potential with and through ICT.  As a phenomenological study involving 10 participants, such implications are neither generalizable, nor comprehensive.  This study sought for depth of meaning rather than breadth of application and, as such, must be considered in relation to other studies that address similar issues using other methodological approaches.  Language presented a barrier in cases where the participants struggled to find the right words to describe their lived experiences.   The methods used in this study sought to address this limitation.  However, the fact remains that the participants might have shared more or chosen different words if they had been able to speak in their first language.  The next two chapters provide a review of the relevant philosophical and methodological literature in order to help frame these limitations and elucidate the

phenomenological significance of this study for those dedicated to the success and

wellbeing of international students in Canadian post-secondary institutions.

**Chapter 2:**
**A Philosophical Investigation into ICT Help Seeking in a Multicultural, Post-Secondary Setting**

*Multiculturalism as such refers, therefore, to a community in the making*
*and not to a plurality of cultures. Its meaning encompasses the creation of*
*spaces within which different communities (defined by race/ethnicity,*
*gender, and/or class) feel encouraged and are able to grow.*
Ghosh & Abdi, 2004, <u>Education and the politics of difference</u>, p. 35

**A Communal Space, Shared by Many**

Sitting atop a hill in a village in Ukraine one evening in the early 1990s, wondering what to do for a social activity with some students in our camp, my mind went blank. A leader in the group came up with an idea that excited the others and set them into action. The proposition: find a chicken, kill it, cook it and eat it with warm, freshly pulled, unpasteurized milk. Memories such as these evoke the feelings, sensations and relations to others, time and space within what Don Ihde (1990) would term the *lifeworld shape* of the places I inhabited in Ukraine. This lifeworld shape was entwined with the specific technologies used, developed or adapted by the people who lived in the Carpathian mountain range where our program took place. In this particular anecdote, the technology was the knowledge of, access to and skill in using basic farm equipment, a lifeworld shape far removed from my previous life experience. In today's world, the breadth of new, oddly familiar, outmoded or altered technologies one can experience are boundless. In a thesis project such as this, it thus becomes critical to qualify the technology or technologies under investigation, in this case information and communications technology (ICT).

Technology is a term that goes back to the Greek *tekhnologia*, being a combination of the word *technē,* meaning "art, skill, craft, method, system" and the word *–logia*, meaning "a speaking, a discourse", and thus expanded has come to signify theory, doctrine and science.   The word technology can thus be seen as meaning a system or method, as well as a potential physical object and related set of skills to operate it.  The word "information" comes from the Latin word *informatio*, meaning "outline, concept, idea", and is the noun form of the Latin verb *informare*, meaning "to shape, form, train, instruct, educate".  The word "communication" while having some similarities in its employment and etymology is quite different in many respects.  It is similar in that its Latin verb form, *communicare*, meant "to share, to impart"; however it also meant literally, "to make common", drawing from the Latin noun *communis.*  The Latin noun, *communis*, is translated as "in common, public, general, shared by many".  When we put together the words "information and communications technology", we have therefore a very complex term, being a noun phrase consisting of three nouns, with "information and communications" operating as a collective pre-determiner to the noun "technology".  Working from the etymological roots of these words, it could thus be written out as having the meaning of "the art, skills, system and method of conceptualizing and outlining ideas through exchange with others in a communal space shared by many".  For a post-secondary student in North America, this manifests in the usage of computer applications typical to completing academic assignments and administrative tasks.

With this definition in mind, the following chapter explores the topic of ICT help seeking for international students from a phenomenological perspective, drawing upon philosophical and theoretical texts in the areas of technology, language and action.   The

analysis of the literature in these areas has been broken into two sections. The first

section explores philosophical issues related to requiring ICT assistance and the second

section examines the philosophical issues related to requesting and receiving ICT

assistance.  In each section, the metaphor of the "click" is used to reflect upon the various

ways in which a phrase, such as "just click here", can be interpreted from being an

embodied action to an act of caring.

## Requiring ICT Assistance

At the very origin of this study is the lived experience of international students

arriving in Canada to study and experiencing difficulties with using ICT for their studies.

This lived experience must be understood in order to comprehend how international

students experience requesting and receiving ICT assistance.  Don Ihde's (1990)

threefold concept of *phenomenological technics*, *cultural hermeneutics* and *lifeworld*

*shapes* is a useful framework to present a synthesis of the literature in this area.  In his

phenomenology of technics, Ihde outlined four types of interactions between humans,

technology and the lifeworld: embodiment relations, hermeneutic relations, alterity

relations and background relations (p.107).   Ihde focused on the existence of

technologies that impact our lives in different ways, depending on where the technologies

sit upon the continuum of relations and "what roles they play in specific contexts"

(Verbeek, 1999, p. 122).   For the purposes of this thesis, this continuum for ICT relates

most directly to embodiment and hermeneutic relations and reaches into both the cultural

hermeneutics and lifeworld shapes of the post-secondary institutions that international

students study in.

**Human-Technology Relations and the Embodied, Transparent Click**

One of the most cited examples of embodied relations with technology is that of Heidegger's (1977) hammer.  The hammer represents a tangible piece of equipment meant for a fairly specific task: we can pick up and hammer and use it with the intention of hammering, since it was constructed with this purpose in mind.  He wrote,

> The hammering itself uncovers the specific 'manipulability' of the hammer.  The kind of Being which equipment possesses – in which it manifests itself in its own right – we call '*readiness-to-hand*'.  (Heidegger, 1977, p.102)

For Heidegger, the moment of facing a tool's brokenness was when we truly discover its usefulness.  When we have a broken hammer and try to find a replacement for it using another tool, we often discover that almost everything else is entirely unfit for the job.  In this manner, Heidegger associated human-technological relations with his overarching concept of existential Being-in-the-world, a combination of our own intentional Being with the inherent Being and intended use of the tool itself.

Merleau-Ponty (1945/2004) took this idea further to explore how tools we use are not only known to us in their usefulness, but become integrated into our perception as consciousness-in-the-world.  The hammer analogy could be extended such that through using a hammer we are able *see* and *feel* the nail and the board.  It is in this way that we may stop hammering, sensing the nail has gone in too far or is in the wrong place. Merleau-Ponty (1945/2004) used the case of driving a car or using a walking stick for a visually impaired person to demonstrate his point. Each case involves the development of a spatial relationship with the world that incorporates the car or walking stick, such that the walking stick or the car "is to be transplanted into them, or conversely, to incorporate them into the bulk of our body" (p.166).   In phenomenological terms, we do not extend

ourselves into the world mentally with our sensations, but rather we experience our

embodied being-in-the-world through our sensations as we interact physically with our

environment.  Using the typewriter as an example, Merleau-Ponty (1962) showed that it

is entirely possible for someone to be exceptional at something but incapable of verbally

explaining how or why.  In using a keyboard, the knowledge of it is not vested in the

mind alone, but in the body, in the keyboard itself, and ultimately in the fusion of all of

these in perception.  He wrote,

> To know how to type is not, then, to know the place of each letter among
> the keys, nor even to have acquired a conditioned reflex for each one,
> which is set in motion as it comes before our eye. […] It is knowledge in
> the hands, which is forthcoming only when bodily effort is made, and
> cannot be formulated in detachment from that effort.  (Merleau-Ponty,
> 1945/2004, p.166)

Merleau-Ponty's (1945/2004) use of the typewriter as an example can be

extended to frame the embodied human-technology relation with the computer through

interaction with a keyboard/mouse.  However, for Ihde this interaction would have not

only an embodied significance, but a hermeneutic one as well.  We can interact with the

computer programs through the keyboard/mouse as an embodiment relation [(I-

keyboard/mouse) – computer], and simultaneously, with our experience using the

keyboard/mouse, we can come to know the purpose of the shift-keys or the right and left

click of the mouse and use it according to its hermeneutic relation to the computer [I –

(keyboard/mouse-computer)].  This becomes habit for us, in the way Merleau-Ponty

(1945/2004) described habitual action; an incorporation of the keyboard/mouse into our

perception and engagement with the computer.  Ihde called this seamless relationship

"hermeneutic transparency" (p 94).  He wrote,

> Acute perceptual seeing must be learned and, once acquired, occurs as familiarly as the act of seeing itself.  For the accomplished and critical reader, the hermeneutic transparency of some set of instruments is as clear and as immediate as a visual examination of some specimen.  The peculiarity of hermeneutic transparency does not lie in either way deliberate or effortful accomplishment of interpretation (although in learning any new text or language, that effort does become apparent). That is why the praxis that grows up within the hermeneutic context retains the same sense of spontaneity that occurs in simple acts of motility.  (Ihde, 1990, p. 94)

For Ihde, the break with technology that Heidegger described with the hammer metaphor was equally possible in relation to hermeneutic transparency.  If it becomes a matter of interpreting the meaning of certain clickable icons on a computer screen then the software's hermeneutic transparency is lost.   In Bakhtin's terms (1986) this knowledge and interaction with technology would be cast as involving a chain of "utterances" over time, existing as words, instructions or symbols on a computer screen and ascribed to the speech genre of the software program (p. 72).  Understanding the icons and terminology for a word processing interface requires a certain level of knowledge and experience with the language, symbols and abbreviations used to represent certain actions.

> In essence, language, or functional, styles are nothing other than generic styles for certain spheres of human activity and communication.  Each sphere has and applies its own genres that correspond to its own specific conditions.  There are also particular styles that correspond to these genres.  A particular function (scientific, technical, commentarial, business, everyday) and the particular conditions of speech communication specific for each sphere give rise to particular genres, that is, certain relatively stable thematic, compositional, and stylistic types of utterances. (Bakhtin, 1986, p.64)

Similarly, Derrida (1973/2002) approached the hermeneutic aspect of language from a socio-cultural, socio-historical perspective.  Icons on a computer screen would be seen as traces which have meaning not only in their differences from one another (as in the difference between the "Reply" and the "Reply to all" icon in email programs), but in

their spacing and temporality.  The trace is not only retrievable in the very moment in

which it is clicked as a conscious act, but is "the simulacrum of a presence that dislocates,

displaces and refers beyond itself" (p.569).  In this perspective, hermeneutic transparency

with ICT goes much further than linguistic interpretation: it requires an understanding of

the possible commands and actions inherent within a software program, its relationship to

a specific speech genre(s) and its connection to a particular praxis (i.e. academic writing,

video journalism) over time.

There are many implications of the embodied and hermeneutic ICT relations for

international students with limited or no background with ICT.  At an embodied level, the

students' potential lack of abilities to physically manipulate a mouse or keyboard could

result in assignments taking longer to complete.  Especially where students come from an

environment where they were able to submit hand-written assignments, the requirement

to use computers could affect physical wellbeing.  The potential frustration that broken

embodiment relations might cause would be compounded if an international student had

limited, if any, experience with specific software programs.   The experience of facing a

blank page in a word processing program and trying to figure out the significance of

various icons or commands could be disconcerting and the depth of need quite large.

From a linguistic standpoint, if the international student's first and possibly second or

third language is other than English, than the chance for hermeneutic transparency may

decrease substantially.

**The Network Society and the Playful Click**

To develop hermeneutic transparency with ICT, one must have the linguistic

ability and knowledge of specific speech genre, as well as the necessary cultural capital

(Bourdieu, 1984/2001)**.** According to Bourdieu (1984/2001), our knowledge of,

preferences with and skills with doing specific things over others are shaped through our

familial upbringing, our social environment and our economic class. Cultural capital in

the context of this thesis would be directly related to past experience with ICT, affected

by such things as personal access, regional infrastructure, economic class, familial and

societal acceptance of ICT and other social, economic and cultural factors. Developing

one's knowledge of and skills in using ICT would originate from an acceptance and

integration of ICT into one's day-to-day life. In such case it might also be related to

access, where cost and privilege may play a role. With access and experience to ICT, a

person is more able to understand the speech genre of the software program and possibly

develop an understanding of the underlying language behind a number of related

programs. He or she may also become part of a "rise to a particular genre" (Bakhtin,

1986, p. 64) afforded through ICT. For example, Ihde (1990) commented on how the

word processing editing process has altered the way in which some texts are written.

> [W]ord processing also encourages the reappearance of which I call the
> 'Germanic tome', the highly footnoted and documented treatise now made easier
> by the various footnoting programs […] (Ihde, 1990, p.142)

Selber (2004), in his book *Multiliteracies for a digital age*, presented an

assimilation of such emerging speech genres in a questioning, creative and production-

oriented approach to teaching writing and communications in higher education. Selber

(2004) attached terms such as functional, critical and rhetorical literacy to both the

deconstruction and composition of texts. These literacies, for Selber (2004), included

learning the how-tos of software applications, but went far beyond. He proposed a

critical thinking approach, questioning the configuration and assumptions underlying the

software, and developing an ability to see and use these applications as a means of self-expression. With these human-technology-world relations in mind, the complexity of ICT and its integration into daily life are themes that must be considered seriously.

At the core of this issue is Ihde's (1990) series of questions: "Are technologies *mere* things that, like inert matter, do nothing in themselves? Or do technologies affect the very ways we act, perceive and understand?" (p. 4). As a means into this discussion, Ihde looked at the phenomenology of technology transfer.

> The temptation may be strong here to leap to a contextless conclusion that the 'technology' as such is 'neutral', but takes on its significance dependent upon different 'uses'. But such a conclusion remains at most a disembodied abstraction. The technology is only what it is in some use-context. Even discarded technologies, whether in museums of science and industry, ruins against a landscape, or re-fitted into bricolage construction, continue to indicate their perceivable 'usefulness'. (Ihde, 1990, p.128).

According to Ihde, technology may be employed differently across cultures, expressed in its linguistic and cultural systems, or it may be entirely overlooked, unseen and unspoken, due to limited access or hidden intended use. At another level, he posited that with a high level of hermeneutic and embodied transparency with ICT in a culture permeated with ICT, the relationship that can develop with computers, for example, can shift. Computers may become not only tools to complete tasks, but tools that impact how things are done. This social transformation is something that Sherry Turkle (1995) looked at in depth in her book *Life on the Screen: Identity in the age of internet*. She explored the ways in which modern advances in ICT have impacted socialization and human-computer interaction. She wrote,

> Computers don't just do things for us, they do things to us, including our ways of thinking about ourselves and other people. A decade ago, such subjective effects of the computer presence were secondary in the sense that they were not the ones

being sought. Today, things are often the other way around. People explicitly turn to computers for experiences that they hope will change their ways of thinking or will affect their social and emotional lives. (Turkle, 1995, p.26)

With these words, Turkle (1995) opened a discussion on the lifeworld shape that ICT brought to cultures marked by ubiquitous use of computers. One of the most commonly used terms for how we describe the broader technological era in which we locate the ubiquity of ICT is the "information society". Webster (2002), the person who coined this term, argued that while this term provides a heuristic description of an information-laden world, it was "of little use to social scientists, and still less to the wider public's understanding of transformations in the world today"(p. 22). Castells (1996) put forward the term, "network society" to describe the qualitative shifts we are experiencing through ICTs, from increased mobility to the emergence of virtual reality cultures. He described networks as comprising "the new social morphology of our societies" and that the "diffusion of networking logic substantially modifies the operation and outcomes of production, experience, power and culture" (Castells, 1996, p. 469). Turkle (1995) addressed the modification of how we work in a networked age by asserting that the rules of engagement have changed. She wrote,

> Instead of having to follow a set of rules laid down in advance, computer users are encouraged to tinker in simulated microworlds. There, they learn about how things work by interacting with them. One can see the evidence of this change in the way businesses do their financial planning, architects design buildings, and teenagers play with simulation games. (Turkle, 1995, p. 52)

Turkle (1995) and Castells (1996) described ways we create, act, and relate to others with the help of computers, and at the same time, they argued that computers have affected the ways we do these very things. Turkle's (1995) use of the words tinker and play, visualization and manipulation, and her association of computers with human

endeavor, signify cultural ways of being and acting with computers, and with others in the world through computers.  But what does it mean when someone suggests that a person "play around on the computer" or "play with a program", but not that he or she "play the computer"?  By definition, to play with something signifies "to fiddle or mess about with", whereas to play something means to "to operate" or "to cause" (Collins English Dictionary, 2003).

In their book, *Information Ages,* Hobart and Schiffman (1998) touched upon this demarcation by contrasting the term "information play" with what they name as the "power and pure technique" of digital technology (p. 202).  They asserted that these dual forces are what drive our current age of information, wherein "[…]substance has vanished entirely from information" and wherein "[w]e have drawn the information idiom so far away from the immediacy of experience that no content whatsoever is retained in its digital symbols" (p. 203).  They argue that this power and pure technique is exemplified in the encoding of data through algorithms based upon the Boolean logic of *and*, *or* and *not*, and with the aid of electrical circuitry and silicon, to reduce, store and retrieve sensory data, such as sound, image, and text, in the form of 0s and 1s.   The power is in the formation of these rules which govern the behaviour of the technology, and the purity of the technique is in the exactness of the encoding.

Play, on the other hand was, to Hobart and Schiffman (1998), the direct consequence of this pure technique.  At the computer interface level, the configuration of encoded sensory data can be altered, manipulated and presented in multiple ways, like the architectural student creating a building with a design program, or the instructor creating a course with a learning management system.  This play is what they described as the

"looseness" in contemporary manifestation of information, defined by its "its lack of closure in knowledge, from the arbitrariness of symbols, and from the union of digital symbol with electronic computer, a union whose high-speed and algorithmic, iterating capabilities can generate completely novel forms of information" (Hobart & Schiffman, 1998, p. 236).  With pure technique, we have made play possible: with the internet, we have access to mass amounts of information that can be made available to vast numbers of people at speeds unheard of before; with complex computer programs, we can map chaos and make predictions about such complex matters as population growth; and through computer simulation, we are able to virtually enact, direct and reflect on the evolution of phenomenon (Hobart & Schiffman, 1998).

> [P]ower and play provide us historical purchase on contemporary information age as pure technique. […]  Even more to the point, through the magic of encoding, power and play frame the interchange between these two dimensions of information.  (Hobart & Schiffman, 1998, p. 204)

With these words, it would appear as though Hobart & Schiffman adapted Sir Francis Bacon's famous quote, "Knowledge is power", rooted in the rise of modern science. In our contemporary age, it is information and communications technology which constitutes power.  This parallel mustn't be overlooked, nor the significance of using the word, "power", understated.  Whereas the word "power" comes through the Anglo-Norman word *poer*, derived from the Latin word *posse*, which means "to be able" (Collins English Dictionary, 2003), the word has a much broader significance in its usage. Such phrases as a "powerful person", a "position of power" or an "abuse of power" signify that power is an attribute, a responsibility and a possession; power can be both part of a person, and a thing in itself.

In the lifeworld shape of Canadian post-secondary institutions, having knowledge of and skills in using ICT can represent a form of power, both something earned and something owned.  Conversely, lacking such knowledge and skill might represent or feel like a form of powerlessness. Wiebe, Shaver, and Wogalter (2003) found that many North American adults held serious reservations with regard to the Internet's addictive nature and lack of personal security.  International students may also feel disempowered by, or forced to adopt ICT.  At the same time, international students who have limited experience with ICT may also feel excited or engaged by the power and play of ICT and the possibilities it offers.  Requiring ICT assistance in this perspective is connected to personal agency. The lifeworld shape that ICT may seem to offer becomes something strived after, rather than feared or negated.  It may be that this motivation acts as a means to overcome challenges faced by international students with limited or no background with ICT.  The promise of being successful in the lifeworld of their post-secondary institution may help them work through other, less positive feelings associated with requiring ICT assistance.

## Requesting and Receiving ICT Assistance

The scope of potential lived meaning associated with requiring ICT assistance leads from broken embodiment relations and reduced hermeneutic transparency to a potential sense of struggle or excitement in the face of lifeworld shape infused with ICT. Before and at the moment of requiring assistance, an international student with limited or no ICT background would likely begin his or her help seeking.  This search would come in the form of requesting and receiving ICT assistance, two related but distinct lived experiences.   Bakhtin's philosophical work in language and action (1981; 1986) provides

a holistic approach from which these two lived experiences can be explored. His

concepts of *heteroglossia, addressivity* and *answerability* reach into the layers of

potential lived meaning of moving from requiring ICT assistance to seeking help and

overcoming difficulties.

**Agency and the Attentive Click**

The action of asking for help is multi-layered in context to the issues that may be

manifest when an international student with limited or no ICT background decides to

seek assistance with ICT. Who does the student ask? How does he or she phrase the

question? What should he or she ask in the first place? Underlying these questions are

two major contextual issues: how asking for help is framed in the culture of the learning

environment in which the student is requesting assistance; and how the learning

environment is set up to provide help to new international students. Communication is

of principle importance for both of these issues. For Bakhtin (1986), one of the greatest

challenges of our modern world is to exist in a sea of different dialects and languages, not

only circumscribed by national or ethnic lines, but through the *speech genres* that may

exist within a specific language itself. According to Bakhtin (1981), our common spaces

where we interact cross-culturally, inter-disciplinarily, across genders and classes, may

create more confusion than understanding.

> At any given moment of its evolution, language is stratified not only into
> linguistic dialects in the strict sense of the word (according to formal linguistic
> markers, especially phonetic), but also – and for us this is the essential point –
> into languages that are socio-ideological: languages of social groups,
> "professional" and "generic" languages; languages of generations, and so forth.
> […] And this stratification and heteroglossia, once realized, is not only a static
> invariant of linguistic life, but also what insures its dynamics: stratification and
> heteroglossia widen and deepen as long as language is alive and developing.
> (Bakhtin, 1981, 271-272)

In a heteroglot world, we cannot take for granted that others will understand what we say to them.  We do not share the intimacy of speech that close friends or lovers might, we cannot anticipate that our intonation is not misinterpreted as an essential aspect of the utterances we share with others we do not know (Bakhtin, 1986).  It is entirely possible, then, for an international student to be capable of communicating amongst colleagues in one's chosen field but be able to successfully ask questions regarding ICT assistance.  Bakhtin wrote (1986) on this possibility,

> Frequently a person who has excellent command of speech in some areas of cultural communication, who is able to read a scholarly paper or engage in scholarly discussion, who speaks well on social questions, is silent or very awkward in social conversation.   Here it is not a matter of impoverished vocabulary or of style, taken abstractly; this is entirely a matter of the inability to command a repertoire of genres of social conversation, the lack of a sufficient supply of those ideas about the whole of the utterance that help to cast one's speech quickly and naturally in certain compositional and stylistic forms, the inability to grasp a word promptly, to begin and end correctly (composition is very uncomplicated in these genres). (Bakhin, 1986, p. 80)

To ask for assistance with ICT demands a certain level of knowledge, linguistically and technically.  For some international students, especially those with limited ICT background, the technical aspect of their questions may not be clear to them.

To locate the issue of requesting ICT assistance solely within the linguistic realm would however miss the critical element of community.   From a theoretical perspective, the concept of the community of practice (Lave & Wenger, 1991) can provide a lens from which to view this aspect of the lived experience of requesting ICT assistance for international students with limited or no ICT background.  From research based largely upon anthropological studies of apprenticeship and situated cognition (Lave, 1982; Lave, 1993; Lave, 1997), Lave and Wenger (1991) proposed a model of communities involved

in specific, shared practices, from professional to vocational to leisure. The model is not culture dependent.  Rather, it explores the dynamics of professional and vocational enterprises, highlighting the importance of certain key elements in making a community successful in integrating "newcomers" and enabling them to become competent in the areas of practice they focus upon.  Strong communities of practice are considered to include access to *oldtimers* (those who have much experience and knowledge in their field of practice) who can help the *inbound newcomers* (those who are coming into the community of practice and lack the knowledge and skills to succeed).  *Legitimate peripheral participation* plays a central part in enabling this interaction between new and old can reach its potential. Lave and Wenger (1991) coined this term, referring to the importance of having an equal level of access to the necessary tools and resources for all members of the community.

International students may come from a context where their community of practice in high school or university was structured in a dissimilar way to that in Canada. A good example of this is the approachability of professors in a North American post-secondary setting, where seeking assistance is often encouraged.  Another example is the formalization of help provision in North American post-secondary learning environments, where there are help desks and paid staff to assist students through various student support units.  Oldtimers who are paid staff may not be the kind of help providers that some international students would naturally seek.  They might wish to ask their peers instead.  The act of requesting ICT assistance requires an understanding and appreciation of the way in which the community of practice for students has been developed in their newly adopted, Canadian post-secondary institution. As McCarthy and Wright (2004)

explained, the existence of a community of practice does not equate legitimate peripheral participation: the inbound trajectory of a newcomer into that community may be experienced in a haphazard or frustrating way.

Access to the necessary resources and tools is affected by the support provided to and the abilities of an international student to integrate into their community of practice as university students. A mismatched relationship with oldtimers or a lack of understanding of the required speech genre to communicate may affect the capacity of international students to incorporate *addressivity* (Bakhtin, 1986) into their speech relations with others. For Bakhtin (1986) addressivity was a communicative means to overcome the confusion and misunderstandings that heteroglossia could create.

> An essential (constitutive) marker of the utterance is its quality of being directed to someone, its *addressivity*. […] Both the composition and, particularly, the style of the utterance depend on those to whom the utterance is addressed, how the speaker (or writer) senses and imagines his addressees, and the force of their effect on the utterance. […] When speaking I always take into account the apperceptive background of the addressee's perception of my speech: the extent to which he is familiar with the situation, whether he has special knowledge of the given cultural area of communication, his views and convictions, his prejudices (from my viewpoint), his sympathies and antipathies – because all this will determine his active responsive understanding of my utterance. (Bakhtin, 1986, p. 95-96)

If an international student is not able to relate how they should ask a question to a professional help provider, if they do not know how to *address* this person properly, then their ICT help seeking may be hindered.

However, both interlocutors must adapt to the speech genre of ICT help seeking and try to tailor their utterances to the knowledge, experience and attitudes of their addressee. An international student may require the same level of careful, thoughtful articulation of support as that required of him or her to request it. Addressivity plays an

equal, if not more important role, from a pedagogical perspective, as a help provider can set the tone in any help seeking experience.  To explore the phenomenological issues around receiving ICT assistance, we must reach back into the lived experience of requiring ICT assistance and the potential embodied and hermeneutic difficulties being faced.   One means to enter this discussion is through contemplating the implications of Merleau-Ponty's concepts of *attention* and *judgment* (1945/2004, pp.30-59).

For Merleau-Ponty (1945/2004), if philosophy was to reinstate the private field of experience, it had to accept a dichotomy: counter to empiricism, it had to accept that we can only know (and be attentive to) "what we are looking for, otherwise we would not be looking for it", and that, counter to intellectualism, we had to accept that attentiveness requires the "need to be ignorant of what we are looking for, or equally again we should not be searching" (p.47).  For Merleau-Ponty (1945/2004), what had to be overturned was a passive conception of the subject, where knowledge of the world was gained either through "self-discovery" of objects-in-the-world as a psychological notion, or through the experiencing of the "constancy" of objects, where there is an absolute reality of the world or where the world is seen as the "immanent end of knowledge" (1945/2004, p. 47).  Contrary to these concepts, Merleau-Ponty (1945/2004) contended that attention "presupposes a transformation of the mental field" that is both created by the acting subject and is located within a certain field, such as looking at a painting and focusing on one image within it (p. 35).  He wrote,

> "[A]ttention is neither an association of images, nor the return to itself of thought already in control of its objects, but the active constitution of the new object which makes explicit and articulate what was until then presented as no more than an indeterminate horizon." (Merleau-Ponty, 1945/2004, p.35)

It is within this act where thought itself originates that our attention motivates our bringing forth of our previous and as-yet knowledge of the world, and, stemming from our consciousness, our attention focuses upon a determinate object and literally transforms it "at every moment of its own history in the unity of a new meaning" (p.36). The concept of judgement in a phenomenology of perception must be considered as an act of thought bearing upon and in concert with attention.  It is neither an independent function apart from attention, nor is it passive; it is in relation to something perceived, something which exists as the object of attention.

In applying these concepts, we can go back to the example of providing guidance to an international student by asking him or her to "just click here".  The object of attention in this case would be the icon or the link to click upon, something which exists upon the screen as an object of perception in the world.  While it might seem entirely self-evident to the person offering assistance what "here" represents in speaking it, for the international student, this "here" may be lacking context.  The international student may simply not be paying attention to the same thing.  In this case we are looking at the phrase itself, "just click here", an act of speech shared between two individuals.  These words, having a combined meaning unto itself, are employed to focus attention about how to use a mouse and a software program.  In Merleau-Ponty's (1945/2004) line of thinking, while the software program, the mouse and the words "just click here" taken altogether may not at all be judged to have the same meaning by these same two people, this program exists in the world and is, or could be, part of the speaker's and listener's embodied consciousness-in-the-world, depending upon their focus of attention.  It is not

therefore simply enough to locate a potential misunderstanding in differences in judgement, but in the act of attention itself.

The only way that this can be remedied is through communication. It is the form of this communication that is central to the pedagogical thoughtfulness in offering ICT assistance.  For, as with attention and judgement, Merleau-Ponty (1945/2004) argued that speech neither comes after thought as thinking independent of words, nor was speech explainable as a response to stimuli in the world.  Rather, he posited within speech the existence of thought or as he simply stated: "the word has a meaning" (1945/2004, p. 206).  This meaning is not, however, only found within speech, but within gesture as well, as each are considered expressions we create in the world, with and through our body.  In this way, pointing to a screen while saying "just click here" is not a combination of words separated from thought and an abstract, universal symbol of pointing, but rather "it is intermingled with the structure of the world outlined by the gesture" (Merleau-Ponty, 1945/2004, p. 216).  Its comprehension depends upon it already existing within the lexicon of the person it is intended for, or in the person taking up its meaning by connecting it to overall environmental and contextual features which surrounds it.  In this way, the expression is in relation to something in the world (in this case, a computer screen, a mouse, and a computer program) upon which attention and judgement is called.  This is what Merleau-Ponty (1945/2001) described as the simultaneous constitution of thought and expression.  Thus, when the speech and accompanying gesture of pointing is comprehended in its significance, it does not make the person think of direction; it is direction itself.

> The gesture presents itself to me as a question, bringing certain perceptible bits of the world to my notice, and inviting my concurrence in them.  Communication is

achieved when my conduct identifies this path with its own.  There is mutual confirmation between myself and others.

<div align="right">(Merleau-Ponty, 1945/2004, 215)</div>

The force of Merleau-Ponty's (1945/2004) concepts of attention and judgement is the non-individualized intentionality of communication between people, the shared lived experience of communication in the world with objects as part of the act of speaking and perceiving.  Communication is not something that is experienced individually in the minds of interlocutors, it is experienced in action, in the doing of speaking and pointing and demonstrating ICT assistance.  This perspective relates strongly with activity theory (Gay & Hembrooke, 2004; Kaptelenin & Nardi, 2006), an interdisciplinary field drawing from the work of Vygotsky (1978) and developed further in recent years by Engeström (1999).  Activity theory focuses on the role of activity in culture and human development.  In this theoretical perspective, individuals experience the use of tools in specific socio-cultural activities in relationship with others who impart their use through formally, non-formally or informally structured, incremental steps.  Activities are viewed as being composed of actions and operations, the former being large in scope and goal-directed and the latter being less complex parts of the activity (Katpelenin & Nardi, 2006).  The role of culture, social interaction and individual agency in activity theory are foremost and provide a lens for viewing the lived experience of requesting and receiving ICT assistance for international students with limited or no ICT background.  Activity theory introduces the concept of personal agency.

> Activity theory and phenomenology position humans as the most powerful agents, beings with purpose and intentionality.  In activity theory, the aware, intentional subject, engaged in object-oriented activity, acts to fulfill specific motives, rather than reaction, applying simple rules, or just doing what the system says to do. (Kaptelenin & Nardi, 2006, p. 234)

The lived meaning of being an agent in an academic community of practice is complex, as the relationship between oldtimers and newcomers and access to resources is often bound with competition rather than collaboration. While the lived experience of seeking ICT support may be qualitatively different from seeking assistance with such things as trying to find out what to do on a Saturday night in Saskatoon, there may be similarities.  It will not likely include the need for guidance to develop the technical knowledge of how to cull a chicken, milk a cow and eventually, access a repertoire of songs to share around a kitchen table.  And yet, integrated within the lifeworld shape of Saskatoon, even potential leisure activities such as hiking along the Meewasin Trail or going to a movie at Rainbow Cinemas might require knowledge of how to access Internet to gather information. International students with limited or no ICT background may experience a deep and complex form of ICT help seeking extending beyond their studies as they adapt to a lifeworld shape intricately bound with the use of computers.

**Answerability and the Caring Click**

Through a physical, dialogical interaction with ICT, a help provider may enable, or harness the agency, of an international student to work through his or her difficulties in a graduated manner.  Such a level of assistance requires the person providing ICT assistance to provide meaningful, contextual support that may extend his or her conception of his or her role.  At a foundational level this engagement with international students requiring and requesting ICT assistance is tied with moral agency.  It is ethical in nature.  This philosophical dimension to action and communication is explored in both Bakhtin's (1993) concept of the *answerability* and Emmanuel Levinas' (1969/2002) concepts of *infinity* and *exteriority*.

Similar to Bakhin's (1986) concept of addressivity in relation to language and communication, Bakhtin (1993), in his terse and partially completed text, *Toward a philosophy of the act*, presented a theoretical analysis of action. His discussion culminated in the related concepts of *answerability* and the *non-alibi of being*. The similarity in concepts was in their relation to the importance of presence, of the lived moment, as the locus of speech and action. According to Bakhtin (1986), static concepts of style and composition gave way to the emergent genres of speech, both written and spoken. As opposed to the grammatical construct of the sentence, it was in the moment of speaking, with tone, gesture and in relation to what has been spoken before and what comes after that meaning of the utterance was made. In Bakhtin's (1993) philosophy of action, a static conception of ethical right and wrong could also be created: an idealized, rational categorization of ethical truths. However, in the moment of the act itself, such categories would be reduced to abstractions. They could not be imposed nor obliged. For Bakhtin (1993), such abstractions could not act upon us from outside ourselves as it was impossible, in his line of reasoning, for us to remove ourselves from the moment. In Bakhtin's (1993) terms, we could have *no alibi of being* to explain our lack of presence in a particular moment. Our choice of action could only be made in the words and physical movements we might choose in a lived moment, or the emotional-volitional tone of our engagement with others. With this non-alibi of being, came what Bakhtin (1993) termed *answerability*, the ultimate moral, ethical position.

> The fact that this active, emotional-volitional tone (permeating everything actually experienced) reflects the whole individual uniqueness of the given moment of an event does not render it in any way impressionistically irresponsible and only speciously valid. It is precisely here that we find the roots of active answerability, *my* answerability: the emotional-volitional tone seeks to express the truth [*pravda*]

of the given moment, and that relates to the ultimate, unitary, and once-occurrent unity. (Bakhtin, 1993, p. 37)

Levinas (1969/2002) also treaded into a phenomenological examination of action and ethics, and like Bakhtin (1993) posited ethics in the present moment where language and gesture are shared with another human being. He reached deep into Merleau-Ponty's (1945/2004) notion of gesture (including speech) as embodied intentionality and resurrects reason within language, within the moment of speech itself.

> If […] reason lives in language, if the first rationality gleams forth in the opposition of the face to face, if the first intelligible, the first signification, is the infinity of intelligence that presents itself (that is, speaks to me) in the face, if reason is defined by signification rather than signification being defined by the impersonal structures of reason, if society precedes the apparition of these eyes that look at me, if finally, we recall that this look appeals to my responsibility and consecrates my freedom as responsibility and gift of self – then the pluralism of society would not disappear in the elevation to reason, but would be its condition. (Levinas, 1969/2002, p. 525)

The existence of a pluralist society as a condition of reason was, for Levinas (1969/2002), the basis from which to approach speech and gesture as the foundation of ethical action. This plurality was infinite in its possibilities as we could never meet every single human being alive at one point in time. And thus, he argued that in facing and communicating with another human being, we were facing the infinite, something which was manifest in the very existence of the concept of the Other.

> Signification is the Infinite, but infinity does not present itself to a transcendental thought, or even to meaningful activity, but presents itself in the Other; the other faces me and puts me in question and *obliges* me by his essence qua infinity. That "something" we call signification arises in being with language because the essence of language is the relation with the Other. (Levinas, 1969/2002, 524)

Our enjoyment in life, according to Levinas (1969/2002), came from the signification we experience interacting with other people. Even bound by societal and cultural norms and obligations, our interactions should be considered infinite because all possibilities could

not be completely known, extending beyond us in time.  And yet, the Other would always call us into communion, and through words and gesture we must come to relate to one another, to reason with one other.  Contrary to the abstract conception of an obligation to adhere to ethical truth, as Bakhtin (1993) argued against, Levinas (2969/2002) presented obligation as an act of facing another person, in this *exteriority* of the lived moment.  As with Bakhin (1993), Levinas (1969/2002) argued against an interior, categorical, totalizing construct of reason and ethics, disconnected from the moments in which we live in communion with others.

Reason and ethics are two philosophical issues that, for the purposes of this thesis may be the most important of all.  If the purpose of this thesis is to explore the pedagogical tactfulness and thoughtfulness that van Manen (1997) ascribes to educational, human science research, than the rational and ethical provision of ICT assistance must be addressed.  What Bakhtin (1993) and Levinas (1969/2002) pointed out is that such an exploration is not an abstraction, but is concretely located within the language and gesture expressed between people, and that these are experienced subjectively, or as a society, pluralistically.  It is through interaction in speech and gesture that international students experience ethical or unethical, and rational or irrational levels of assistance.

While it is not in the purview of this thesis to cast judgement, it will be of interest to ascertain the difference between how international students have experienced what they would term good ICT support and what they would term poor ICT support such that the phenomenon of ICT help seeking may be described and interpreted more fully.   This cannot be simplified into a series of steps to providing appropriate ICT support for

international students.  The lived meaning of good ICT support may not simply reside in

the appropriateness of the technical solution provided, but in the way that the

international students experience the reasoning and ethical approach taken by the person

who provided support, in the very words and gestures that they employed.  In this

manner, the etymological paraphrase of ICT that serves this research as a reference point

comes to have tremendous relevance.  ICT defined as "the art, skills, system and method

of conceptualizing and outlining ideas through exchange with others in a communal

space shared by many", invokes all of the social, hermeneutic, linguistic and perceptual

issues that have been raised throughout this chapter, and concludes with the notion of

exchange, Otherness, community and plurality.

## Conclusion

In their introductory chapter to their text, *Education and politics of difference*,

Ratna Ghosh and Ali Abdi (2004) invoked Derrida's concept of *differance* (1973/2002)

as a critical post-modern, philosophical foundation of multicultural education.  Similar to

Bakhtin's concept of the *utterance* (1986), this term originates in Derrida's (1973/2002)

literary philosophy.  Derrida (1973/2002) approaches the deconstruction of text from a

position whereby multiple interpretations are possible, where words are given meaning

through their relationship to one another and to the reader or listener.  Ghosh and Abdi

recasted this term to its original, *difference*, and reflected upon its meaning in a

multicultural socio-political context.  They wrote that "[h]ere, difference is taken as a

process of construction of meaning in the interplay of power and identity, which brings

together groups on the basis of their subordination" (Ghosh & Abdi, 2004, p.26).   The

development of multicultural learning environments in a postmodern world, they argued,

must "[resist] the idea of culture as an organizing principle", and rather focused on the "creation of space within which different communities (defined by race/ethnicity, gender, and/or class) feel encouraged and are able to grow" (Ghosh & Abdi, 2004, p.35).

This invocation to develop an educational space where a diversity of students, including international students, "feel encouraged and are able to grow" is the essential intent of this thesis. This cannot be done by focusing on only one aspect of an international student's lived experience with ICT help seeking. From a pedagogical perspective, the interconnectedness of requiring, requesting and receiving ICT assistance is critical. By reflecting upon and researching all three of these lived experiences together, the full spectrum of lived existantials are brought to light, from human-technology-world relations of requiring ICT assistance to the lived body, time, space and human relations involved in the requesting and receiving of help from others. To seek to understand phenomena such as these is to engage fully in the enterprise of international education. With such a project, the effort is taken to understand how international students experience what might be considered a "normal" post-secondary learning environment. Bakhtin (1986) writes,

> In the realm of culture, outsideness is a most powerful factor in understanding. It is only in the eyes of *another* culture that foreign culture reveals itself fully and profoundly (but not maximally fully, because there will be cultures that see and understand even more). A meaning only reveals its depths once it has encountered and come into contact with another, foreign meaning: they engage in a kind of dialogue, which surmounts the closedness and one-sidedness of these particular meanings, these cultures. (Bakhtin, 1986, p.7)

In my lived experience working and studying in places such as Ukraine, Germany and Bangladesh, it has been upon my return to Canada that I have become most acutely aware of the world in which I was brought up and live. The spacious grocery stores with

abundant food, the expansiveness of land and the scarcity of people, the instant access to communications, information and entertainment through technology, all these things have revealed themselves to me in new ways, changing their lived meaning in my life forever. This is the intent of phenomenology as a research method. It is not intended to describe the world as it is, but to engage in a philosophical exploration of the lived experiences of others in order that we might be changed somehow by what we have learned through the anecdotes and reflections of research participants. For this thesis, it is to enter into the lived meaning of lived experience, a place of multiple horizons, into a place where we seek to learn and grow as professionals in our field, as human beings in a diverse, ICT rich, pluralistic society. The next chapter lays out this methodological foundation, introducing key concepts in phenomenology, explaining the methods used in this study and introducing the participants who shared their stories and reflections to make this research journey possible.

## Chapter 3:
## Methodology

*Making something of a text or lived experience by interpreting its meaning is more accurately a process of insightful invention, discovery or disclosure - grasping and formulating a thematic understanding is not a rule-bound process but a free act of 'seeing' meaning.*

- *Van Manen, 1997,*
*Researching Lived Experience: Human Science for an Action Sensitive Pedagogy, p. 79*

### Phenomenology and the Qualitative Research Continuum

As a phenomenological investigation, this thesis follows the approach to researching lived experience and lived meaning as described by van Manen (1996; 1997; 2002). This approach is rooted in the tradition of the "Human Sciences", derived from the German word *Geisteswissenschaften*, which means the study of "the human world characterized by *Geist* – mind, thoughts, consciousness, values, feelings, emotions, actions, and purposes, which find their objectifications in languages, beliefs, arts, and institutions" (van Manen, 1997, p. 3). In North America, the human sciences have come to include many different approaches to research, from critical theory to phenomenological sociology. What marks them as distinct from the natural sciences is that they focus upon "beings that have 'consciousness' and that 'act purposefully' in and on the world by creative objects of 'meaning' that are 'expressions' of how human beings exist in the world" (Van Manen, 1997, p. 4). The following chapter outlines this methodological basis for this thesis, examining the origins and scope of phenomenology and the specific methods employed in the gathering, interpretation and expression of the data for this thesis, including ethical issues and limitations of the research. The chapter

also introduces the participants who offered their anecdotes and reflections in relation to their lived experiences requiring, requesting and receiving ICT assistance.

Denzin and Lincoln (1998) described the field of qualitative inquiry as being open to incorporating many methods and as approaching the topic under study from an interpretative and naturalistic paradigm. By interpretative and naturalistic they meant that "qualitative researchers study things in their natural settings, attempting to make sense of, or interpret phenomenon in terms of the meanings people bring to them" (Denzin & Lincoln, 1998, p.3). They also asserted that qualitative researchers are sensitive to and make explicit their relationship with their subjects and the situations that they observe and participate in, emphasizing that researchers bring their own value systems to the research they undertake. Bogden and Biklen (2003) also described qualitative research along these lines, adding that qualitative researchers focus on questions related to process, often seeking to uncover how things are done, how ideas and practice come to be, and how these processes impact our lives. They also asserted that qualitative research is inductive, in that qualitative researchers are not interested in advancing a predetermined hypothesis that they bring into the study. Rather, they aim to develop their abstractions from the sources of data that they gather as the study progresses.

Morse and Richards (2002) identified three major strands of qualitative research, one of them being phenomenology. Phenomenology as a research methodology is often attributed to Edmund Husserl and refers to the description of "anything that appears or presents itself, such as emotions, thoughts and physical objects" as it is experienced (Ehrich, 2003, p.45-46), and thus is considered a return to the "things themselves"

(Husserl, 1970, p. 252, cited in Ehrich, 2003, p.46).   This return requires refocusing upon the "horizon of indeterminate actuality" that exists in our everyday life (Husserl, 1999, p.61).  The aim of phenomenology according to Husserl (1991) was to help dispel the mists from the infinite surroundings which is our world as perceived in time and space, and in doing so "this horizon is disclosed in ever new ways and becomes richer and more vital" (p.199).   Drawing from the work of the German philosophers Husserl and Heidegger, and Max van Manen, Morse and Richards (2002) described phenomenology as focused on the lived, situated experience of individuals, the meaning that they give to their experience, and the description, reflection and interpretation of this lived meaning as experienced and described by the participants and explored through the work of the researcher.

This thesis follows a methodology that may be described as hermeneutic phenomenology. This is a term that combines two traditions in research and scholarship. The terms hermeneutic and phenomenology each signify different aspects of this nature of inquiry which have been merged together over time and through various critiques, additions and adaptations to previous writings in phenomenology by different philosophers.  Hermeneutics originated as a learned art of interpreting texts, especially the Bible. Through the writings of Dilthey, Heidegger and Gadamer, hermeneutics has also come to also present "a philosophical position which regards understanding and interpretation as endemic to and a definitive mark of human existence and social life" (Ödman & Kerdeman, 1999, p184).  Heidegger's application of hermeneutics to Husserl's original reflections and writings had great implications upon how

phenomenology has been adapted and appended over time (Cohen, Kahn & Steeves, 2000).

A foundational principle of phenomenological research is the role of the research to "bracket" or "try to control" his or her own "natural attitude" towards the phenomenon under study (Ehrich, 2003, p.49). Through bracketing or eidic (phenomenological) reduction, Husserl considered it possible for the human science researcher to discover the essences of objects and bring their "meaning to the objects of consciousness" (Ehrich, 2003). Phenomenological reduction is a process of focusing on the object under investigation with the aim to discern its essences, whether this be of an experience, a thought or an object. This requires that one may have to leave out of this focus other elements of the object, thought or experience that may be added into, extraneous or separable from their essence (Ehrich, 2003). In van Manen's words, "[t]he aim of the reduction is to re-achieve a direct and primitive contact with the world as we experience it rather than as we conceptualize it" (van Manen, 2000).

What Husserl originally aimed for was an understanding of "pure consciousness", a notion that he later altered in face of criticism of being too idealistic (Ehrich, 2003). His later work introduced the concept of the life-world, emphasizing exploration of the lived-world and horizons of meaning of lived experience, meaning that "[e]xperiences are not isolated, but take place in particular contexts or horizons" (Ehrich, 2003. p.51). In hermeneutic terms, this becomes part of the basic hermeneutic circle, in which an object or phenomenon is first described as it is lived and experienced, looked at under isolation, and then is looked at as part of the whole of experience, and through this investigation, the essence of the phenomenon can surface (Alvesson & Sköldberg, 2000). Heidegger

added a further existential element to this hermeneutic circle, describing human

experience as *being-in-the-world*, meaning that human consciousness could not be taken

out of context (Lopez & Willis, 2004).   The subject of hermeneutic inquiry should be

based upon an individual's stories and experiences of his or her day-to-day life (Lopez &

Willis, 2004), requiring a researcher to move from the pre-understanding to the

understanding of a phenomenon, to a search for the "*revelation of something hidden*"

(Alvesson & Sköldberg, 2000, p. 57).

Hermeneutic phenomenology thus includes both description and interpretation of

phenomenon, because there can never be description without interpretation.   van Manen

(1997) wrote,

> Phenomenology is, on the one hand, description of the lived-through quality of
> lived experience, and on the other hand, description of meaning *of the expressions*
> of lived experience.  The two types of descriptions seem somewhat different in
> the sense that the first on is an immediate description of the lifeworld as lived
> whereas the second one is an intermediate (or a mediated) description of the
> lifeworld as expressed in symbolic form. (van Manen, 1997, p. 25).

While van Manen opened the field for many *expressions* of lived experience to be

part of phenomenological research, he also made a clear distinction about what cannot be

included.  According to him, journalistic or biographic accounts of an experience, a

poorly illuminated lived experience, or an experience described phenomenologically for

the purposes of developing or supporting preconceived theoretical constructs did not

constitute the work of the human scientist.  Successful phenomenological description was

one which is "*collected by lived experience and recollects lived experience – is validated*

*by lived experience and it validates lived experience*" (van Manen, 1997, p.27).

Phenomenology is not a distinct field of study unto its own, but a philosophy and

approach to research.  It is a perspective upon how to investigate and reflect upon lived

human experience "and practical actions of everyday life" (van Manen, 1997, p.4).

The phenomenological approach of van Manen (1997) drew first and foremost

upon the "anecdote", the lived experiences that participants shared with the researcher.

According to van Manen (1997), the anecdote was not characterized by how it did or did

not relate or to general abstract principles, nor how it could be used as a means to group,

transcribe, and find statistical significance.  Rather, it was meant to provide the basis for

what he describes as a theory of the unique.

> Pedagogical theory has to be *theory of the unique*, of the particular case.
> Theory of the unique starts with and from the single case, searches for
> universal qualities, and returns to the single case.  The educational
> theorist, as pedagogue, symbolically leaves the child – in reflective
> thought – to be with the child in a real way, to know what is appropriate
> for this child or these children, here and now.  (van Manen, 1997, p.150).

These universal qualities were not the same as stating factual truths about a phenomenon,

as in trying to explain it from a perspective where truth could be found outside, or beyond

human experience.  As Merleau-Ponty (1945/2004) wrote,

> Truth does not 'inhabit' only the 'inner man', or more accurately, there is
> no inner man, man is in the world, and only in the world does he know
> himself.  When I return to myself from an excursion into the real of
> dogmatic common sense or of science, I find, not a source of intrinsic
> truth, but a subject destined to the world.
> (Merleau-Ponty, 1945/2004, x-xi)

## Research Methods

van Manen (1997) provided a "a set of guides and recommendations for a

principled form of enquiry" (p.30) for hermeneutic phenomenology, as the methodology,

by its nature, does not prescribe methods and techniques in a strict manner.  The guide

that van Manen proposed for action sensitive pedagogy provides the foundation upon

which the research methods for this study have been developed.  Four aspects of van Manen's research methodology form the basis of this research proposal: the role of the four existential in analyzing anecdotes and other sources of lived experiences; the importance of seeking similarities and differences in discovering what is essential to a phenomena; the concept of text as including action, literary sources, journals and art; and the search for the "uniqueness" of lived experience.

At the core of hermeneutic phenomenological reflection is the guiding concept of lifeworld existentials (van Manen, 1997).  These existentials go beyond the thematic interpretation of the analysis of a particular phenomena and reach into the "immense complexity of the lifeworld" transcending "historical, cultural or social situatedness" (p.101).   The term lifeworld was introduced by Husserl as referring to "our natural pre-theoretical attitude to life", grounded in our present, lived experience (van Manen, 2000).  According to van Manen (1997), the four lifeworld existentials are lived space (spatiality), live body (corporeality), lived time (temporality), and live human relation (relationality or communality).  Lived space refers to how we experience our physical environment from our own lived meaning in it; lived body refers our mind-body connection and how our lived world and lived relations can affect our bodily state; lived time refers to our subjective experience of time in relation to our lived experience; and lived human relation refers to our interpersonal contacts and existential urge to know the "other".  Interpreting these themes is, however, the "most difficult and controversial element of phenomenological human science" (van Manen, 1997, p.106).  The researcher must try to distinguish what is representative of the phenomenon under study and that would not be representative of something else in order to differentiate essential and

universal themes from incidental ones.  To do this, van Manen introduced the

phenomenological exercise of "free imaginative variation" which requires asking oneself

these questions: "Is this phenomenon still the same if we imaginatively change or delete

this theme from the phenomenon?" and "Does the phenomenon without this theme lose

its fundamental meaning?" (107). van Manen (1997) described this aspect of

phenomenological research and writing as follows,

> *In determining the universal or essential quality of a theme our concern is to discover aspects of qualities that make a phenomenon what it is and without which the phenomenon could not be what it is.*  To this end the phenomenologist uses the method of free imaginative variation in order to verify whether a theme belongs to a phenomenon essentially (rather than incidentally).  The process of free imaginative variation can also be used to generate other essential themes.(107).

The third element of van Manen's (1997) approach to human science research that

structures the research for this study is his broad interpretation of what constitutes

sources of lived experience. His list included: personal experience (as a place of

beginning the phenomenological inquiry); etymological sources and idiomatic phrases;

experiential descriptions from others (i.e. interviews and writing out experience);

observation; art, literature, biographies and autobiographies; diaries, journals and logs;

and, relevant phenomenological writings.  This breadth of possible sources speaks to the

fact that, according to van Manen, "[T]he lifeworld, the world of lived experience, is both

the source and the object of lived experience" (van Manen, 1997, p.53).  van Manen

(1997) stressed that the original nature of the sources are altered through the process of

receiving the reflections and anecdotes of participants in writing or taped interviews.

This is what marks the interpretive element of phenomenological description, requiring a

"strong orientation" to writing that is focused on a pedagogical theory based on a "*theory*

*of the unique*, of the particular case" (van Manen, 1997, p.150). van Manen (1997) emphasized a human science of action sensitive pedagogy that required persistent attention to the pedagogic aspect and implications of the phenomenon under study, written with richly described evidence of the lived experience under investigation.   In this respect, van Manen (1997) considered educational human science research as "critically oriented action research" intent on making the unique experience of students the basis of pedagogic decision making, and the development "action-sensitive knowledge" as a means of developing the capacity of educators to relate in a phenomenological manner with the lived experience of their students (van Manen, 1997, p.154-160).

In hermeneutic phenomenology, it is through writing that the significance of phenomenological inquiry can be known (van Manen, 2002).  Phenomenology requires approaching the act of writing as central to its method and purpose.

> The phenomenologist does not present the reader with a conclusive argument or with a determinate set of ideas, essences, or insights. Instead, he or she aims to be allusive by orienting the reader reflectively to that region of lived experience where the phenomenon dwells in recognizable form. More strongly put, the reader must become possessed by the allusive power of the text – taken, touched, overcome by the addressive effect of its reflective engagement with the text. (p.238)

The act of reflecting on the texts gathered in this study and writing about them in an evocative manner is what led to a contemplative engagement with the "unique" pedagogical significance of the lived meaning experienced by international students who require and receive ICT assistance.   With this in mind, as described in the section on qualitative research, my positionality as an interpretative researcher's had to be made explicit before and during the research process.  As the intent of hermeneutic

phenomenology is meant to be both descriptive and interpretive, this required that I researcher "bracket" my own values such that I could "more accurately describe respondents' life experiences" (Ahern, 1999).

According to van Manen (2000), there are different "levels" of bracketing or "suspension of belief" in which reduction can occur.  Reduction, or the act of reflection, is both integrated into the experience of conducting interviews and observations as it is a part of the writing process and integration of the various sources of lived experience.  The five types of reduction that he presented are "wonder (heuristic reduction), openness (hermeneutic reduction), concreteness (phenomenological reduction), universality in contingency (eidetic reduction), and flexible rationality (methodological reduction)" (van Manen, 2000).  To engage in each of these kinds of reduction requires self-awareness and attentiveness to the lived moment of conducting research and interacting with one's research participants.   For the research in this thesis, each of these types of reduction played a role in some measure in how I interacted with the participants and wrote my analysis of the data.  As someone who has worked extensively with international students for the past 15 years, to sustain my sense of wonder and openness to different interpretations of the results required self-checking and checking with the participants on numerous occasions.  The research demanded a high level of eidetic reduction, as help seeking in general held, for the participants, lived meaning that extended beyond their lived experiences with using ICT.  I used a guideline for questions during the interviews and focus groups; however, I needed to keep the research conversational and responsive to the anecdotes and reflections shared by the participants.  An example of the convergence of phenomenological reductions was the emergence of the participants'

emphasis upon their lived experience of help giving to other students in need and the reflection and analysis I undertook to relate the essence of these lived experiences to the lived meaning of help seeking.

Following Ahern's (1999) *Ten tips for reflexive bracketing*, before I conducted the interviews, through writing, I reflected upon the values, personal background and assumptions that I brought with me to the topic. During the interviewing stage, I tried to contain my own emotional attachments to the topic in order to sustain a degree of neutrality. I kept aware of when I reached a level of data saturation such that the potential horizons of meaning of what the participants shared were not obscured. At these points, I remained open to the possibility that I might need to change my questions or alter my perspective upon how I was interpreting my participants' anecdotes and reflections. When I completed my written analysis, I reviewed the data to ensure that I hadn't over quoted from one participant, and continually assessed my literature review for potential bias in the sources I have chosen. I had to return to my data often and I checked with my participants if I my interpretation resonated with them. As advised by Bogden and Biklen (2003), I maintained a journal to record notes from interviews and observations and to keep track of the decisions I make in my research. This helped in returning to my work, identifying issues I might have missed and check my assumptions and/or biases.

To thematically analyze my data, I utilized the multiple reading method suggested by van Manen (1997). This method includes beginning holistically and looking for lived meaning, moving toward selectively identifying elements in the text that signify essential aspects of the experience, and then reading line-by-line to seek what it is in the text that

reveals the phenomenon being explored.  I used the four existentials of lived space, lived

time, lived body and lived human relation to guide the interpretation of this thematic

analysis.   Using the list of sources for lived experience as described by van Manen

(1997), I also incorporated fiction, art and film into my interpretation.   Following the

elaborated hermeneutic circle as described by Alvesson and Sköldberg (2000), I shared

this interpretation with my participants, inviting their response to my analysis.  This was

an iterative process, returning over and over to the texts, each time trying to seek a deeper

understanding of what remained hidden in the horizons of meaning as expressed by my

participants. Through this process, I aimed to discover the essential themes that were

particular to the phenomenon of requiring, requesting and receiving ICT assistance as an

international student in a Canadian post-secondary setting.

This required incorporating free imaginative variation, as discussed previously,

but also reached into the usage of metaphor.  I tried to first understand what universal

essences may guide the particular themes, moving from part to whole, from pre-

understand to understanding, and from the text to other expressions of similar lived

experience found in literature, art and phenomenological writings.  From these themes

emerged a metaphorical expression of the lived meaning of seeking ICT assistance,

drawn from analogies and the lived existentials shared through the participants' stories

and reflections.  Maxine Greene's approach to the use of metaphor in educational

research and practice (1997) provides a concise explanation of how metaphor helped

guide my phenomenological research and writing.

> A metaphor enables us to understand one thing better by likening it to what it is
> not. […] A metaphor not only involves a reorientation of consciousness, it also
> enables us to cross divides, to make connections between ourselves and others,
> and to look through the other eyes. (Greene, 1997, p.391)

At an evaluative level, Lincoln and Guba's (1985) criteria for qualitative and naturalistic research provided a useful framework to guide the methodology of this study. They presented the areas of credibility, transferability, dependability and confirmability as measures to assess the *trustworthiness* of a qualitative study. The credibility of this study is based upon using multiple sources of lived experience and by using the hermeneutic circle, the four lived existentials, and free imaginative variation to analyze the meaning of the experiential materials that I gathered and was given. I have ensured the transferability of my study by providing a detailed description of the lived environment and context of the research. I wrote the text in such a way that it is oriented toward a pedagogical theory of the unique, respectful of the particulars of the lived worlds and lived meanings described by my participants. Ensuring dependability required that I bracket myself and faithfully look for deviant cases within the text, through reviewing the data thoroughly and by ensuring that I hadn't ignored participants' voices due to my own bias. Achieving confirmability required that I write my text evocatively, and attain the "phenomenological nod" associated with hermeneutic phenomenological reflection (van Manen, 1997, p 27). This is an emotional, empathic, understanding response to reading text that resonates with one's own personal life experience.

Selecting from the list of relational criteria provided by Lincoln (1995), the evaluation standards of community/relationality, voice, critical subjectivity and reciprocity were also important for this study. To attain community and relationality, I have been offering the university community training sessions from issues arising in my literature review on intercultural educational technology and have developed sessions on

help seeking for international students.  In terms of phenomenological writing, relationality was achieved through enabling a full immersive quality of my description of the lived experiences I explored.  To pay heed to the participants' voices I tried to stay attuned to the layers of voices that my participants have acquired through their own historical and cultural heritage.  Although my study did not involve many participants, I attempted to look at the alternative voices within the cultural groups that participated.  I was able to have a balance of female and male voices represented.  To ensure reciprocity and critical subjectivity, I provided time to establish rapport and mutuality with my participants.

**Sample and Interviews**

I used a purposive sampling for the study, in order that I characterized the phenomenon I wished to study (Silverman, 2005).  Purposive sampling is an intentional selection of research participants based upon specific criteria.  In the case of this thesis, this included the participants' self-assessment that they arrived in Canada with limited or no ICT background and have since become capable using ICT for their studies.  To gain access to participants, I approached the relevant gatekeepers in the university community at such places as a university office for international students, university-wide and faculty run student computer labs, the umbrella college for graduate studies and research, the undergraduate and graduate students' and international students' associations, and the second language training centres on campus.  After gaining access to these places, I posted flyers there and ask the gatekeepers to guide any potential candidates in my direction.  These candidates contacted me by phone and/or email, and once they contacted me, I followed up by explaining the purpose of the study, and assessing their

eligibility.  If they fit the criteria mentioned previously and were willing to participate, I asked them to provide informed consent by signing a plain language consent form.

I conducted two interviews of one hour each, using the approach laid out in Cohen, Kahn and Steeves (2002).  The first interview sought to develop rapport and a conversational relationship in order to draw out personal stories.  Questions asked at this interview included Grand Tour topics, such as:

- What is a typical day at the university like for you?

- How much of your time would you say you spend each day using technology for your studies?  What types of things do you do using ICT?

- Before coming to Canada to study, in what ways did you use ICT (information and communications technologies) in your study and/or work life?

More conversational and anecdotal questions followed, such as:

- When you were in [home country] did you ever experience a time where you had difficulty using ICT?  Tell me about this experience?  Did you receive any assistance to help you deal with this difficulty?  How did you feel when you received this assistance?  How did you feel after receiving this assistance?

- When you have difficulty using ICT at the university here, how do you typically try to solve the problem?  Who do you typically ask for assistance?

- Can you think of a particular moment when you faced a problem in using ICT since arriving in Canada to study?   Tell a story of what this experience was like for you?  How did if feel for you to be facing this difficulty?

- Can you think of a particular moment when you overcame a problem in using ICT
  since arriving in Canada to study?  What was this experience like for you?  How did
  if feel for you to overcome this difficulty?

- Can you think of a particular moment when you received very good ICT assistance to
  help you face a difficulty in using ICT?  Can you describe that experience?  What was
  this experience like for you?  How did what the person did to provide you assistance
  that makes you feel the experience was positive?

- Can you think of a particular moment when you received very poor ICT assistance to
  help you face a difficulty in using ICT?  Can you describe that experience?  What was
  this experience like for you?  How did what the person did to provide you assistance
  that makes you feel the experience was negative?

Following the suggestion outlined in van Manen (1997), the second interview reviewed and discussed the interpretations I made from the first interview as a means to seek confirmation, find agreement, or address divergences in reflective insights.  The aim was to find shared themes that resonate with the participants and that could lead toward an oriented hermeneutic phenomenological exploration of the topic.

**Participants**

In total, there were, in total, 10 participants in this study.  The following charts provide an overview of the students, their level of university study, gender, and country of origin. Participants have been given pseudonyms.

Interviews

| Name | Level of study | Country | Gender |
|------|----------------|---------|--------|
| Leo | Master | Western Africa | Male |
| Vlad* | PhD | Eastern Europe | Male |
| Samiya* | Master | Southeast Asia | Female |
| Abul* | Master | Southeast Asia | Male |
| Aline | Undergraduate | Western Africa | Female |
| Irena* | Master | Eastern Europe | Female |

* These participants would be considered English as Another Language (EAL) students.

Focus Group

| Name | Level of study | Country | Gender |
|------|----------------|---------|--------|
| Oba | Undergraduate | Western Africa | Female |
| Chidi | Undergraduate | Western Africa | Male |
| Idoho | Undergraduate | Western Africa | Male |
| Mafi | Undergraduate | Western Africa | Male |

In the interview group, for everyone except Samiya, there were two interviews, each lasting from 45 minutes to 1 hr. and 15 minutes. The focus group lasted approximately 45 minutes. The students came from a variety of disciplines, including engineering, physical education, arts and science and education. They were recruited from two different universities in Western Canada over a four month period. Leo and Samiya would be considered "mature" students, having worked in their countries before coming to Canada. The majority of the participants came to Canada out of high school or straight out of an undergraduate program in their country or in another country. Six of the participants had studied comprehensively in an English language environment before coming to Canada. Four of the participants would therefore technically be considered English as Another Language (EAL) students.

More will be learned about these participants in the chapters to follow, as their anecdotes and reflections speak more deeply to their identity than any further demographic information. However, even with this limited information, the diversity of

this small sample is evident.  This made the research project both enriching and

challenging from a data analysis perspective.  As van Manen (1997) urges in

phenomenological research, there was a clear requirement to keep away from broad

conceptualizations of cultural issues and focus upon the phenomena under investigation.

Analyzing the anecdotes and reflections of the participants required a great deal of free

imaginative variation and reduction in order to reach into a deeper, reflective analysis.

**Research Context**

      Inherent in van Manen's approach to phenomenology, the uniqueness of each case

is not to be subordinated by the discovery of the essences of the lived experience being

explored.  Thus, the very notion of research limitations is inherent in hermeneutic

phenomenological reflection. As there are international students from hundreds of

different nations and whose personal histories are infinite in scope, this study cannot

portend to provide a basis upon which to develop a theory nor a method for the provision

of ICT support to international students facing a difficulties with ICT. With a sample of

ten international students, making any such broad conclusions is inappropriate.

      A further challenge for this study related to language.  Merleau-Ponty

(1945/2004) discussed this difficult challenge with attempting to translate one's thoughts

and ideas into a language other than one's mother tongue.

> The predominance of vowels in one language, or of consonants in another, or the
> constructional and syntactical systems, do not represent so many arbitrary
> conventions for the expression of one and the same idea, but several ways for the
> human body to sing the world's praises and in the last resort to live it.  Hence the
> *full* meaning of a language is never translatable into another.  We may speak
> several languages, but one of them always remains the one in which we live.  In
> order to completely assimilate a language, it would be necessary to make the
> world which it expresses one's own, and one never does belong to two worlds at
> once.  (Merleau-Ponty, 1945/2004, p.218)

At the same time, Merleau-Ponty argued our communication paths are brought together by our embodied consciousness-in-the-world.  Thus, while the "*full* meaning of a language" (Merleau-Ponty, 1945/2004, p.218) might not be translatable, one could relate to another person's expressions of their lived meaning of a common lived experience with similar objects-in-the-world.

Derrida (1973/2002) also addressed by summoning what he describes as a universal, existential expression of our being-in-the-world through language, an idea that he borrowed from Heidegger.  For Derrida (1973/2002), this constituted a hope, one that was based in the first place in very naming of things, and was, in its other sense, what created the differences in our human family of languages.  This can be seen as a parallel to Merleau-Ponty's (1945/2004) line of thought.  Merleau-Ponty (1945/2004) argued that we experience things-in-the-world as embodied consciousness, and through language and gesture we communicate our understanding and knowledge of, and skills in using these objects.  Derrida (1973/2002) argued that it was in our Being and our expression of it in the world that we could find commonality.

Merleau-Ponty (1945/2004) and Derrida (1973/2002) bring both a focusing direction and encouraging reinforcement for the research methods and approach of this study. While there were clearly some language difficulties, it was possible to find places where we met as researcher and participants in our interpretations of the lived meaning expressed by the participants.  Phenomenology was an exceptional means to undertake this task, since it does not intend towards generalization in a "factual" sense, but rather aims to shed light upon a particular experience faced by a particular person and try to grasp its uniqueness and essential characteristics and interpreted meaning.  This is not

undertaken objectively, as though the participant were being observed and seen as distant and separate from the researcher.  Where language difficulties and differences arose, they became part of the research itself and through their resolution led towards insights that brought about a focus grounded this research in evocative texts.

### Conclusion

The limitations inherent in this study can be seen inversely as its very purpose and rationale.  What it cannot seek to accomplish, it does not intend.  According to van Manen (1997), the aim of phenomenological educational research is to develop an action-sensitive approach to pedagogy, where the researcher and the reader are evoked in such a way that their notions of pedagogy and ways of acting, being and perceiving are challenged to expand and grow.  Phenomenological research involves the "free act of 'seeing' meaning" (van Manen, 1997, p. 79) in lived experience as if were entirely new, bracketing preconceived ideas and experiencing the lived moment of the research with the participants as part of the research itself.

The next two chapters are the result of this methodological approach to researching the lived experiences of seeking ICT assistance for the 10 participants in this study.  It became evident that these lived experiences needed to be presented separately after considering the lived meaning of requiring, requesting and receiving ICT assistance. The lived meaning of requiring ICT assistance emerged as being strongly connected with lived human-technological relations.  The anecdotes and reflections shared by the participants reached into their sense of confidence in comparison to their peers and confusion and personal challenge in context to a learning environment marked by ubiquitous ICT integration.  The lived meaning of requesting and receiving ICT

assistance delved into more interpersonal lived relations, with ICT being a site of interaction with others and the technology in the lifeworld of their learning environment. While these phenemona are treated separately, the chapters continually return to the horizon of lived meaning of the entirety of the participants' lived experiences involved in ICT help seeking.

**Chapter 4:**
**International Students' Lived Experience Requiring ICT Assistance**

*"[I]t's not that big of a, like…computer environment kind of place.  Everybody just goes on with their lives, without having to base their lives on computers compared to how it is here, you know.  Technology is like life here.*
                                                                                                    *- Aline*


**Unique and Multifaceted:**
**Exploring the Horizons of Lived Experience Using ICT**

For many people, it would be impossible to imagine life without a computer, wireless high speed connection, gigabytes of computer memory and a mobile communications device.  To imagine such a world would be like going back in time.  Conversely, there are likely more people on our planet who would have no trouble imagining such a reality as it is exactly what they live.  International students fall anywhere along this spectrum depending on their country of origin, socio-economic background or educational and employment history.  To be effective as educators and student support professionals in a globalized post-secondary educational environment, we must therefore not only pursue a meaningful integration of ICTs into teaching, learning and student affairs.  We must also consider how this integration is experienced by international students with little or no ICT experience, knowledge and/or skills.

This chapter examines a critical aspect of this international student experience, namely how the participants describe what it was like for them to *require* ICT assistance. The next pages contain an exploration of the participants' lived experiences using ICT at three points in time: in their home country before arriving in Canada, during their first year of study in Canada, and at the time that this research was being conducted, years after arriving in Canada. Following this reflective investigation, an interpretative analysis

of these lived experiences proposes essential themes that help in understanding the lived

meaning of requiring ICT assistance for international students with limited or no ICT

background.  As part of the phenomenological approach, interspersed in the chapter are

excerpts from fictional literature, as well as personal anecdotes and reflections.

## Lived Meaning of Requiring ICT Assistance

**Uncertain and Fascinated:**
**Previous Experiences with ICT Before Studying in Canada**

To better understand international students' lived experience requiring ICT

assistance in a Canadian post-secondary institution it is important to delve into their lived

experience with ICT in their home country.  One participant, Leo, shared a reflection that

presents a telling portrait of the multifaceted nature of his past experience.

> I didn't need to use the computing system.  […] Yeah, because someone
> else was doing it, someone else was typing.  And then there were Internet
> cafés, you know.  Where they would send messages, where they would
> type letters. So if I needed to do something official like this, I just sent it to
> them and I paid. […]  And the fact that, I wouldn't do anything
> complicated with the computer, you know? You have these Internet cafés
> where they'll always do your work for you.  What is the problem? If I pay
> them and they'll do it for me, why do I go through the whole process?
> Being expensive…being this thing which is expensive, when are you
> going to have the time? And if I learn it, what am I going to use it for?
> - Leo

Leo is weighing the overall worth of learning ICT to achieve what might be

considered basic tasks, both in terms of the financial and personal investment required.

Leo's question, "And if I learn it, what am I going to use it for?" points to the depth of his

ambiguity about the use of ICT; an uncertainty that was shared by many other students,

especially in relation to their academic studies in their home country.  This ambiguity is

an expression of lived meaning from the participants' unique, manifest experience with access to ICT and its particular applications their home country.

While both access to, and the application of ICT, are experienced variably by all the participants, certain common elements emerged. These commonalities are an unreliable infrastructure for consistent ICT performance, privilege associated with having access to ICT, and a discordant relationship between what the participants learned was possible with ICT and what ICT skills were expected of them in educational contexts. In these conditions the participants felt uncertain about the usefulness of ICT for academic study and yet fascinated by and self motivated to learn the "small stuff" they know could be done using ICT.

In the case of Abul, his literal response to the question "What am I going to use it for?" resulted in a decision that he regretted once he arrived in Canada.

> You know that I am from Bangladesh. I finished my K-12 studies in Bangladesh. After that I went to Turkey to do my undergrad there. And, actually before going to Turkey, I didn't have any experience with technology, like computers. Even I saw the box or the computer you know, but I didn't actually touch it or didn't open it, you know. [….] When I was in England before going to Turkey to Bangladesh, I bought a laptop. It was at that time, 1400 pounds, something more than $3,000. I went home and my younger brother, he said, "Oh, you are going to study, doing your Master's. What are you going to do with laptop? Give it to me. Give it to me." Mum was asking, "Oh, no don't give it to him. It's expensive." But I gave it to him. But after coming here, look everything I am doing, is computer. Literature review, or internet searching or writing, or everything is computer. It's technology.
>
> - Abul

Abul's decision to leave his new laptop at home with his brother leaves no doubt as to the measure of ambiguity he felt about the potential utility of ICT for his academic studies. The computer was a "box" that he didn't open, an object he avoided.

This distant human-technology relationship is a lived experience that is subtly integrated into novel, *Wife*, by Bharati Mukherjee (1975). The main character, Dimple, arrives in New York and while visiting with another family originally from their country, sits and stares at the television, a "black box" that she is longing to have turned on and made to work. In another novel about an Indian family settling in London, entitled *Brick Lane*, Monica Ali (2003) describes a scene where, for the main character Nazneen, the computer is something to keep clean while her lover uses it, an object that makes noises "like insects at nightfall". For both characters, the television or computer screen is either longed for but untouchable or something available but overlooked.

Fear can also result when a technological tool like a computer has a high level of mystery and uncertainty surrounding it. At one point for Leo, this fear was so great that when he went to a library in Dhakar, Senegal and saw that they had an online library catalogue he and his colleagues "ran out" of the building. For Irena, her fear was that if she used the computer, she might break it. Irena speaks to this in fear in her relationship with her brother's computer, a fear that would result in her "not pushing any buttons". Abul may have experienced a combination of these feelings about ICT; however, as he said himself, if he had known what the computer could do for his studies he might not have left his laptop behind. It would not be surprising though, if in context to his previous studies, ICT was simply not part of his learning environment.

Decisions to not apply certain technologies in the classroom may simply be a matter of the teacher or instructor not having experienced their potential application. Mafi, reflecting on the lack of ICT in his past learning environments, comments that his teachers back home "don't even have access to the Internet." Samiya, a math teacher in

her home country, reflected on how she was accustomed to seeing the use of calculators as inappropriate in her teaching. Samiya and Leo are similar in this regard, having both been teachers in their home country and having both been unacquainted with the potential application of ICT in education. Such a lack of awareness about how computers could be integrated into learning environments can create ambiguity for the students. In Irena's case, the way in which the Internet was integrated in her high school provides a glimpse into how confusing this relationship can be.

> At school, everything was written by hand. No other interaction. Not like here…each office has five, six, seven computers. Some of the assignments for us, for instance, if we missed school, they would ask us to find papers on the Internet, translate them and give them to them as a, not penalty, like punishment that we missed school [laughs]. Because professors wouldn't know how to use computers and they didn't know, didn't have the technology. They would say, "Ah, you go do it. Whatever. We don't care how you do it. You go do it."
>
> - Irena

It would seem reasonable from a past experience such as this that Irena would have lost her motivation to use computers, and yet she still persisted in learning some basic ways ICT could help her. As with other participants who faced other types of obstacles to ICT, Irena did this through her own will and self-exploration, and through the good fortune of her parents' decision to purchase a computer to support her brother's studies in computer sciences. Irena's efforts were rewarded not by her teachers, but by her peers who were impressed by one of her test projects, a typed presentation that stood out in comparison "to all the handwriting". Taking advantage of good fortune is something that Vlad also touched upon, where he and his peers could experiment with computers after school because his math and computer science teacher would "allow us to go to the lab". Driven by intrinsic motivation and enabled access by an intuitive teacher, Vlad developed his ICT skills, albeit using out-dated technology and only at a

"very low level". This situation did not improve in his undergraduate universities studies

in his country as computers were expensive and not widely used.

Irena and Vlad's anecdotes take us to the other side of the spectrum, where

participants state they had some access to computers through labs, courses, or Internet

Cafés but also state that there was limited practical use for them outside personal interest.

> Oba: […] We have computer schools. You go for like six months. I have a
> diploma. They offer different programs. Stuff like that.
> Mafi: We had nothing to use it for. We just learned how to use it.
> Chidi: I attended a computer school. So it's like they just teach you how to use
> Word, Corel Draw, spreadsheets and stuff.
> Idoho: But, like you said, we never used it. You know what to use it for. You
> just knew how to use it in case.

For Idoho, using computer programs for real world tasks was something learned "just in

case"; for Mafi, there was "nothing to use it for". By most of the participants' accounts,

ICT was used primarily for email communication and surfing the Internet or for what

they called "really simple" or "just basic" stuff. The drive to use ICT was for personal

reasons or because computers were simply "fascinating", in the words of Idoho.

> [W]hen I was back home, I didn't really know the power of the Internet as much
> as I do now. Because, like their both said, it was just basic stuff. Emails. What's
> going on around the world to keep yourself abreast. […] Over there, well, I
> wanted to use technology. I wanted to use computers because I was interested in
> it. Fascinated in that.
>
> - Idoho

However, due to unreliable access, no matter how fascinating, using computers

for simple tasks could also be quite frustrating. Mafi recollected a story that I can relate

to from my past experience overseas.

> I went to check my inbox.  My inbox was some stuff and, cause…OK.  I was trying to process my admission to this place at some point and I had to do it by Internet and they were sending emails.  And I went to this cybercafé to…I paid for an hour and that one hour I was able to see "Inbox, three messages", but I never saw any message.  And then I went off.
>
> <div align="right">- Mafi</div>

When I was working in Bangladesh as a trainer and curriculum developer in a private elementary school over 10 years ago, I can remember the sinking feeling when the power would go off in the late evening with hours left to go to prepare for the next day.  I remember the unrequited enjoyment of reading email from home, waiting for the information to load only for the computer to freeze.  A school of over 100 children with a teaching staff of 10, there were only two computers, a 200% increase in access compared to other schools in the area.  With the cost of technology outside the margins of most staff and students, showing the teachers how to use computers for any work related purpose was not a priority.  As Leo experienced, the ends just did not seem to justify the means.

At the same time, it was clear that there was a generational shift taking place.  I would visit some of the families' homes and see one of our student's siblings using a computer.  It was a rare occasion and was usually attributed to wealth; however, it was a notable change. This type of generational shift was expressed by many participants in this study.  Irena, for example, said that she missed the kinds of opportunities to use ICT that were afforded to the generation after communism was abolished in her country.  Leo spoke of a change, but not passively. Essentially, he represented the old guard.

> [W]hen I was teaching the high school, the kids there, my own students knew how to manipulate the computer which I didn't do. I did nothing about.  When I was going to come to Canada, I asked some of them to teach me a few things which I didn't understand [laughs]. Even to save on the floppy disk.
>
> <div align="right">- Leo</div>

In this anecdote, Leo takes a self-initiated step towards crossing the digital divide that separates him from his students and, interestingly, he does this because he knows he is coming to Canada to become a student himself.  While he is aware that technology will be important to him in his future studies, he remains uncertain how much.  Leo's past experiences and relationship with ICT will not dissipate once he arrives in Canada, nor will they for the other participants. The fascination, ambivalence, avoidance, fear or frustration they feel about ICT will be challenged by a Canadian post-secondary setting where they must have ICT skills to succeed; where, as Aline describes it, "technology is like life". Their self-motivated engagement with the "small stuff" they can do with computers will be dwarfed by the scope of ICT skills required to manage student affairs and complete assignments.  Frankly stated, their adaptation to a learning environment marked by ubiquitous integration of ICT will be far more difficult than they anticipated.

**Challenged and Vulnerable:**
**Facing Difficulties with ICT in a Canadian Post-secondary Setting**

From the stories shared by the participants, the change in the ICT environment that the participants faced when coming to Canada was remarkable, even baffling.  For Irena, the dramatic shift to a world where a Canadian customs officer could print out her study permit and know everything about her immigration application and where university administration could look up her name and access other personal information was shocking and unsettling.  Her amazement hinted at the disorientation she would feel in the months to come. Irena provides a poignant image of what this experience felt like.

> With everything, like, not only computers, but if I think of little radios and little e-fax machine, the photocopiers you guys have here.  At the beginning they were so complicated, so many buttons, so many functions, so many things that you can do with them.  And once I learned that there's a certain logic that you could follow, I

could figure it out for myself without someone helping me, you know.  So now I could say "I'm in control now".   So…I was lost.  Lost in the street somewhere... Lost in a way that you cannot use and do what you want to do.  Somehow put aside, compared to the other people that know how to do it.

<div align="right">- Irena</div>

Irena's confusion about the logic and meaning of the buttons and functions of the technology she is using and her sense that she "lacks control", is "left aside" and "lost" are echoed by other participants.  Increased, dependable access to ICT and an integrated application of ICT in academic studies resulted in the participants feeling strained lived relations with ICT and with their peers and professors.  This new learning environment resulted in feelings of being challenged to conform to the expectations and standard of use for ICT in both student affairs and academic studies, and feelings of vulnerability due to their perceived lack of ICT knowledge and skills required to succeed.

The sense of "being lost" that Irena feels in her first year of study in Canada provides a potent metaphor to help interpret the lived meaning of the participants' experiences facing difficulties with using ICT.  Irena, like all the participants, did not intend to become lost when she headed to Canada to study.  However, like hikers who are not fully prepared for the potential perils of their journey, the participants had to rely on limited resources to face challenges that went far beyond their expectations.  Oba's reaction to one of her first assignments as an undergraduate student in Canada provides a glimpse into the shock that can be felt in facing such a reality.

I can remember the first paper I had.  Like, usually back home if you have anything more than a page you are going to take it to someone else to write it for you.  And I had to type like a twelve page essay.   After like one page I was like, "Oh my God!  Do I really have to do this?  Do I really have to go through all this just to get ten marks and stuff?"

<div align="right">- Oba</div>

Oba's question, "Do I really have to do this?" is a rejoinder to Leo's query in his

home country, "What am I going to use it for?"  The incredulity of having to type an

essay by herself is exacerbated by the fact that it is only worth 10 marks; Oba is aware

that more such assignments are on the road ahead.  Aline also experienced a sense of

shock in what she felt was a foreign, impersonal integration of ICT at her university.

> Why don't they just send me an email and say come pick it up from the
> university?  I would do that…Like really, I could go in that administration and
> pick it up and just go to the Canadian Revenue and get the money than having to,
> like, look at it and say you can print it out from the…I have no idea how to do
> that.  Things like that they just printed us.  They printed them for us and we would
> just pick them up, and fill in whatever we had to fill in…and then the rest.
>
> - Aline

No matter how deeply the participants may have wanted to reject the requirement

to use ICT, they also knew that they had to meet the standards expected of them in order

to succeed.  Idoho presented this new reality in clear terms; using a computer was no

longer an option, it was a requirement as important as attending classes.

> Right now, I have to use it.  It's not a matter of choice.  Because some of my
> classes, they will be posted online, website.  So if I want to get the notes, I have to
> use the computer.  I can't say I am not going to go to class.  Right?  I don't go to
> class, I am in big trouble.  Because at the end of the day, I still need to use
> computer.  And say if I have research assignment, an English class and you are
> supposed to research on something I have to use the computer.  Even though you
> might go to the library and find something.  Even if you want to use the library,
> you need to use the computer to find where the book is.  Whether it's in the Main
> Library, or the Natural Sciences. So I have to.  I have no choice about it.  So that's
> the change.  From fascination to no choice.
>
> - Idoho

Vlad saw this expectation to learn and use ICT as the way of the future, doing

whatever he could in his early years in Canada to improve his skills.  Nevertheless, he

also hinted at the tension of being required to conform to these expectations.

> I remember first starting my Masters and my prof said that you have to use
> PowerPoint, and I didn't know what PowerPoint was at that time. I found out that

> most of my classmates didn't know here, either. […] And I learned it here…I was really, I wasn't really willing to do that, but I thought, you know, it's easier than overheads.  And I made myself do that.
>
>                                                                  - Vlad

Through forcing his will and making himself learn PowerPoint, Vlad was successful with his presentation and felt that he set a good example for his peers. This "push and pull" to improve ICT knowledge and skills was expressed by the participants to a greater or lesser degree, as it was a process that came with trial and error.  Irena's recollection of developing her first PowerPoint presentation intimates these challenges.

> I learned on the run how to do the presentation in PowerPoint.  Everybody in class had had to do a presentation in PPT, right.  So had to learn, not only that you can only type in the slides, but you can have all these little things coming out at a certain time, and…in the beginning it was…one slide…that's it…And I was trying to fit as much as I could into this slide, because nobody told me…taught me how to actually structure it.
>
>                                                                  - Irena

Irena's assertion that "nobody told" or "taught" her how to use PowerPoint presents important issues that have significance to the pedagogical question of this thesis. An important interpretation of these anecdotes relates to the language that they employ. In the first instance, they speak of figuring things out for themselves by playing around with the program, relying on their limited background knowledge and whatever help they could find through books or through the program itself.  These feelings are positive, as can be seen in this recollection by Vlad.

> I learned a lot of applications by my own.  Most of them, like Photoshop and all that, I just played with it and I learned how to use it. When I started, when I was doing that, my first PowerPoint presentation, I was playing first. […] I was playing with colors and uh, you know, graphics and putting pictures in there and make it nice. And I learned about design and I went to the websites and learned about suggestions how many lines you have to put in PowerPoint and what fonts and backgrounds you can use and so that, to make it more presentable.
>
>                                                                  - Vlad

In the second instance, when faced with a new task that supersedes their independent capacity to figure out how to use a certain program, their language switches. When asked if they felt that they "played" or "tinkered" with technology at such moments, the participants responded in the negative.   Irena explained her feelings about this, comparing a time when she did and didn't feel like she was playing with ICT.

> In my very first year when I came to Canada, I actually did a play presentation for my parents first.  So I just inserted pictures with me, or from dance or whatever, and then insert music. […] It was nothing serious. I didn't have to do it.  It was for fun and I wanted to actually learn how to use all these little features that PPT has.  And then, I had to go to school and actually do an assignment presentation and I had to present it in class, and then it wasn't playing anymore.  It had to be done…Here it had to be really serious.
>
> <div align="right">- Irena</div>

For Irena, learning new programs for her assignment "had to be done" and was "really serious".  Other participants called it "work", saying that they couldn't feel like they were playing if there was a time constraint and/or externally mandated expectations that went beyond their capacity.  Samiya, Abul and Vlad used the term "feeling stuck" as an indicator that they could no longer play with the technology.

For Leo, using computers to complete his assignments early on in his Master's program included many such experiences of feeling stuck and stressed.  His learning process involved making mistakes that cost him valuable time and energy.

> Just not knowing where to click, what to do, tools, spelling, all of those things, and then you don't know how to point. When we are given an assignment and we are told that "look 1500 words".  Can you imagine? After that…one by one until someone goes "just click is that Control A?  Highlight it, go there and then you get"…I got to know that after one academic year, but other time, was counting. […] I didn't know that there was a place you could just say insert the page numbers, you know? So I would type the page here and then it shifted one line…displacing in my whole work, and I needed to redo it, and then they are taking 14 pages from you. Because you have one line there, they combine the page numbers that you needed to redo the whole thing, trying to eliminate the few lines here and there. So that was all a drain on me.  The amount of time I spent

> doing one little thing.  On top of everything else.  Having to read and gather facts.  The most frustrating aspect was just even to draw, even just the typing. My previous knowledge from a typewriter.
>
> - Leo

These are but two of many anecdotes that Leo shared; stories that highlight the

challenging hermeneutic and embodied lived relations he faced using ICT.  He does not

know "what" or "how to click" as he is unaware of the significance of the different tools

and functions of the programs he is using.  To his consternation, Leo's previous

experience with using a typewriter hinders rather than helps: the computer keyboard is

different than the traditional typewriter, with function, scrolling and "home-end-insert-

delete" keys, and the mouse being central to word processing.

For many of the students, using the QUERTY keyboard to type and using

different programs to complete assignments presented obstacles that resulted in feeling

disadvantaged, a significant lived relation with peers and professors.   Oba called this

physical-hermeneutic aspect of her challenges to use ICT trying to "keep up".

> I remember once we had a law discussion in the law library and everyone had a computer.  And people were just typing away.  I'm like, "What?"  Because everyone was as fast, like, she was just going like at that pace, you know.  When you can't keep up with the speed, you know.  Because people that are schooled here they have the advantage cause if you are using the computers since high school.  We just started using it like often when we got here.  So we're kind of not there yet.  We're not on the same level.  So it is not like a level playing field.
>
> - Oba

Chidi expressed feeling "left out" and that that his classmates were "way ahead" of him.

> I had a lot of problems.  Like doing stuff in spreadsheets so I had to like ask my friends a lot of times.  […]  I feel really bad.  Like you feel left out.  I feel left out.  Because every other person is like doing this, solving the problem.  So it kind of feels…like people are way ahead you.
>
> - Chidi

Leo candidly reflects on the lived meaning of these lived relations as it related to his self-esteem.

> And there comes a time, you look at your colleagues, you know, "Are you done with your work?" Do I present some mediocre work? That also got me psychologically frustrated, yeah.  Relationship with my colleagues, you know. It's not a matter, a matter of comparison, no, the matter is not comparison, but this is the standard that's expected.  And you are not meeting it. Are you lazy? Why that? Even though I enjoy the courses, you know? I enjoy the courses, very enriching, but now how do I tell the profs that I understood the courses and I enjoy them. Technology was the barrier.  […] The reward I think for the prof is to show that you understand – you give him a work that shows that you have the standard. […] Others who make ninety, that is not my concern, but I don't want to make sixty.  I should make at least 80 or even 79, fine.
>
> - Leo

Leo's desire to meet the "standard that's expected" and show his comprehension and appreciation to his professors is compelling, as is his assertion that "technology was the barrier".   Like Oba and Chidi, he wants to meet expectations; but Leo is worried that he won't be able to, that he won't get the grades he wants, that he will be seen as "lazy" or "mediocre".  Feeling self-conscious in this way was also intimated by Samiya, reflecting on her state of mind when she first started out in her Master's program.

> But frustration was there a lot, a lot and sometimes I also thought maybe I'm suffering all this just because I don't have enough background with the technology.  And other students they took their courses before like maybe in the undergraduate level or something that you can see few pieces are missing in my part too.  So sometimes I felt uncomfortable like that here. […] And then a lot of stress in my mind that I had to do something extraordinary to keep up with all my classmates.
>
> - Samiya

The feelings of vulnerability expressed by the participants led to different emotional, psychological and physical reactions.  Crying, or feeling as if one could cry, was an emotional response expressed by a number of students, although the underlying urge to cry varied.  For Abul, it was nervousness at an exam when his floppy disc was not

working properly that made him feel like crying.   Aline remembered crying from pent up

frustration trying to register for her courses online and having her selections cancelled

due to a minor error on her part.  She spoke of crying as a way to overcome feelings of

incompetence and regain her bearings.

> You feel like you can't do anything, aren't capable of doing nothing, like you are just useless, like, not that you're useless, but life is like, uh, "What am I supposed to do?" You know, you wish like answers would pop up somewhere…And they're not.  Like face the reality, you know.  You just want to break down crying and after that you try to figure out what's going on.
>
> <div align="right">- Aline</div>

Similarly, Irena related a story of when she cried from feeling overwhelmed by

the expectations to use ICT for one her assignments.  In this anecdote, she also mentions

a peer who faced a difficulty with ICT that pushed him to a strained emotional state.

> For me I was just sooo…discouraged and disappointed that I couldn't, you know, make a graph or whatever, in, again…this limit of time that I had, right? Because I couldn't stay forever there. I had to move on to the other assignments.  Um, you just get to a point where, I dunno, maybe its because I'm a girl, and maybe guys don't cry as much, I don't know.  You get to a point where it just …everything crashes and, there you go, you start crying for what? For a graph that you can't make on a computer, right? Now I'm laughing, but back them I'm thinking…and like, one of the new students that we have, international students, um, he just came in December, and he started this particular class that I took exercise physiology one. Exactly, well, he probably has more computer skills, but…he called me in a weekend, during a weekend, saying, um, you know, "I need help." I wasn't home. I didn't get the message 'til late, and I couldn't call him back. And Monday I talked to him, he said he was in a panic, "I didn't know how to do it, to solve a little problem." I dunno if he cried, but obviously he was to a point, he got to a point where he said, "OK, I'm calling her", right? He used this word, "I was in a panic and I didn't know", and apparently it was a simple thing.
>
> <div align="right">- Irena</div>

Irena's recollections of her and her peer's heightened levels of nervousness and worry,

present a highly vulnerable picture.  For Irena, the stress she felt from trying to "catch

up" with her peers and figure out how to use ICT on her own eventually caused her to

become physically ill with shingles, a condition associated with stress.  Leo describes

feeling like weeping from anxiety, his heart beating faster, alone in a computer lab and

mystified by how to accomplish specific tasks with his word processing program.

> I needed to draw some figures.  I sat on the computer…how was I to go about this? Then there was a man, a teacher from town here who used to help me, so I gave him a ring.  He had traveled and the assignment was to be taken after two days and his wife told me coming back after four days.  Wow, I rushed to the computer room here, waiting.  That was a Saturday. I waited for four hours, you know? Nobody came around. It was just about around a time like this.  It's quiet.  I felt like weeping. Whom was I going to contact? How was I going to give this out? […]  So when that happens, you say your heart's beating, you feel like a physical reaction. It's emotional drain.  It isn't that I haven't got the ideas but the technology was beating me.  It was beating me seriously and if it were at home I just would have gone to the internet café, "Please sir I am trying to draw this, just do it for me".
>
> <div align="right">- Leo</div>

Leo's expression in the second of these anecdotes, "the technology was beating me", is a

very striking image.  In a very real sense, Leo felt overpowered by ICT. The time and

emotional energy that he was putting into figuring out how to use computers to complete

his assignments was "draining" him and, at the start of his studies, even affected his

eating habits and relationships.

Another way that the participants described their lived experience facing

difficulty with ICT was using a language of avoidance.  For example, Aline decided early

on in her studies that, rather than try to understand how to use a photocopier, she would

avoid using it entirely.

> Oh, that's so difficult, the photocopier.  You open it up, and these three things flash.  No there are more than three, and you're supposed to press there, and then you know that, and you look at them and you be like, "Oh my God!  What am I supposed to do now?" […] I haven't asked for anyone for the photocopier. […] I haven't even figured it out. […]  I just don't use it.
>
> <div align="right">- Aline</div>

Aline's eventually decided to use her friend's scanner instead of the photocopiers at her

university, which she felt was a much easier and more convenient approach.  On another

level, Vlad speaks to this avoidance of the technology, but in relation to avoiding certain

programs and using others when he doesn't have time to figure them out.

> I have the programs loaded in my computer, but when it comes to it, I need to get it done fast, I come back to basics instead of using, uh, lets say Dreamweaver, I use, uh, FrontPage because its fast and it has all the tools that I know from Word. So whenever I have a certain baggage of knowledge, uh, of using certain applications, I just, and I don't have time to learn the new thing, I won't go there.
> - Vlad

For both Aline and Vlad, avoidance could be seen as a successful coping mechanism, as

they found ways to fix a problem they faced.   It could also be seen as an indicator of

poor user-friendliness of the technologies they were employing.  However, avoidance can

also be seen as a result of feeling some level of vulnerability; a mechanism to avoiding

failure.

     In another vein, seeking alternative routes in the usage of technology to avoid

failure can be harmful to academic performance.  Oba recollects taking a computer

course in her first term and feeling so stressed by the pace that she forfeits marks.

> Well, I took Computer 100 in my first term, here, like in January 2005.  And we had to do HTML.  I'd never seen or used HTML.  And there were people in my class like, the lab TA would just say, "OK, just right this, this, this and you're done."  And I am like, "What happened here?"  Like, you have to slow down, you know.  At that point, I was like, "Forget the ten points for this thing."
> - Oba

Oba's election to not complete the assignment is a significant decision, one that leans

towards wanting to give up; a feeling that Samiya, Leo and Irena also intimated.

> Yeah I took a course and then I got sick.  I think I got sick or something happened to me too and I took some extension for that course and I came to Andrew.  To ask and the way Andrew explained to me it was so easy after that.  Before that I was just lost in that.  And I, frankly speaking, I was about to drop that course.
> - Samiya

This was a very difficult moment for Samiya. To drop that course would have cost her a lot of time and money. To be that close to giving up, feelings of self-doubt must be very high, indeed. Leo remembers a low point when he started feeling blame and regret.

> And I blame myself for not getting this technology…maybe I could have applied myself more back at home. And then I regret, then I don't…why, why did I even come to study here? There were points, I just told myself "why did I even come to study here?" The main thing, the main frustration was the technology, not reading the books and understanding the courses. No, no, no, no, no.
>
> - Leo

Irena also hit a low moment early on in her studies, questioning whether she should go back home to avoid dealing with the expectations of her new learning environment.

> I went downstairs and asked the daughter of my landlady and she said, "Yeah I'll help you, but I have to go here, and I have to go here, it will be late at night." I didn't have time to be, to wait around and not do my assignment. So, that was probably the limit where I said, "OK, that's it, I don't know how to do it." My fiancée wasn't home because there was a time difference between our cities. [I]ts, there's no, like I didn't have any other solutions. I went for help. I tried it myself. I played, you know, trying doing it…I was trying to do it fast. No help, what else, there was nothing else for me, right. I didn't know if my fiancée knew how to do it until he got home and actually showed me how…so…I get lost. There's no other solution. I was thinking, I should just go back, I can't do this, you know…go back home. There I didn't have to go through all this…computer things, and…assignments, and…there we only have one exam at the end and that's it. You are stressed for three weeks and that's it. Here you are stressed the whole semester [laughter]. You're like, "forget it".
>
> - Irena

Irena's self-doubt in a moment of weakness is entwined with her feelings of helplessness, of being alone, of there being no more solutions to fix the problem. Abul speaks to this feeling of helplessness in face of a very common ICT problem: losing a document.

> Yes, that was like I was helpless that time, you know.  And, in computer if you don't know something and you instantly lost something.  I tried this way. I tried that way. Nothing worked.  But the problem is that the one command I don't know and that is why I faced a lot of problem that night.  And is actually I lost the whole document.  And, I was helpless that night, you know.
>
> - Abul

As with Leo, Abul's helplessness is heightened by the lived meaning of being alone in a computer lab.  The impact of working in such a space has an even deeper significance to Samiya. She is afraid.

> Like at that time there were two different kind of things, I'm not doing good with technology and I'm also afraid of being alone in the building, alone in the computer lab, right.
>
> - Samiya

Feeling left behind, helpless, alone, nervous, fearful, panicked, crying, wanting to give up, feeling your heart beating faster…these are feelings that reach deeply into the emotional and psychological world of these participants when faced with difficulties with ICT that went beyond their capacity.  Returning to Irena's metaphor of being lost, these lived existentials are also described by survivors who were lost and found in the densely forested interior of Nova Scotia.  In the National Film Board of Canada documentary, *Lost* (Martin, McInnes & Nason, 1999), Ricky Chambers reflects on what it felt like for him when he realized he and his friend no longer knew where they were in the forest behind their house.

> Once I realized I was lost, I started panicking.  But then, it was just like, "We had to find a way out because no one knows we are here".  So we started walking around and walking around and walking around.  Going in circles, circles, circles.  And well, it was just too dark to walk. So we couldn't walk no more.  We were so cold, we just couldn't walk no more. It got to the point that we were just like, we were useless.  And it was like, "This is where we are at.  This is where we are going to be found."
>
> - Ricky Chambers (Martin, McInnes & Nason, 1999)

William Antle, who spent 5 nights in freezing weather after getting lost on a hunting trip,

recounts his ordeal both tangibly and philosophically.

> It was a real helpless feeling at the time, because you had no idea where to go,
> which way was out.  The only thing I knew about the area was that I had to travel
> 35 miles to get out the wrong way, but I didn't know what the wrong way was.
> […]  The hardest thing I believe to admit to is that you got lost, because until you
> do that, you know there are certain things you should do when you get lost and
> you don't do them if you don't think you are lost.  You just kind of keep moving
> and traveling and a lot of times you're moving further away from where you were
> and it makes it harder for people to find you.
>                                      - William Antle (Martin, McInnes & Nason, 1999)

Dr. Kenneth Hill of Saint Mary's University (Martin, McInnes & Nason, 1999),

terms Williams' description of what lost people are apt to do, "wood shock".  This is a

phenomenon where people who are lost suddenly become aware of their situation and

start acting erratically.

> This is what the experience of being lost does to you.  It makes you afraid and
> when you are afraid you cannot solve problems.  You cannot solve any sort of
> complex problem at all.  You can't, you can't remember the simplest things like
> about which direction did I turn at that last intersection.  This is why we advise
> people who become lost is the first thing you should do is sit down, calm down,
> get your arousal level down and think about the best way to get out of this
> situation.
>                                      -  Kenneth Hill (Martin, Mcinnes & Nason, 1999)

 While it might seem self-evident, it is not surprising that many people who become lost

cannot calm down enough to collect their thoughts and consider how to get out of their

situation. And yet, continuing to move and be panicked wastes energy and reduces

chances of rescue.  Survival is a matter of thinking about how to keep oneself safe and

more easily found.  It is a matter of overcoming shock or denial at being lost.

The participants in this study can be seen as survivors of their first experiences

dealing with difficulties with ICT as international students in Canada.  They had to

overcome feelings of rejection, frustration, nervousness, anxiety and fear; they had to

calm themselves down in moments of stress, feeling alone and helpless, and seek a solution to their problem.  To interpret the participants' stories in this way is to seek to understand their lived meaning not only in relation to the conditions of their early years as students Canada, nor only to their past experience of feeling uncertain and fascinated with ICT, but in relation to their future lived experiences with ICT as well.   For not only is it that in being found, one can better understand what it means to be lost.  It is also just as true that by being lost, one can better understand what it means to be found.  It is for this reason that we must turn our attention now to how the participants experience ICT in their academic studies after they overcame the initial challenges they faced with ICT.

**Confident and Dependent:**
**Later Lived Experiences Using ICT in Canada**

When conducting the interviews for this research, it was not initially planned to ask questions regarding how the participants felt about using ICT with their current level of knowledge and skill.  In fact, the anecdotes and reflections regarding this question were often shared without being directly asked, sometimes right at the outset of the interview.  As I think back on this, I wonder if perhaps, to speak of feeling vulnerable required first to speak of feeling confident and to speak of being uncertain of the potential use of ICT required first to speak of its learned value.  Often, both vulnerability and confidence and uncertain usefulness and learned usefulness would be expressed within one anecdote.  A good example of this is Irena's reflection discussed earlier, that once she understood the logic of the technology she was using, she could figure out for herself how to overcome difficulties and be "in control".

Feeling in control is a very different feeling and lived relation with ICT than that expressed by the participants in times of great difficulty.  For all the participants in this study, this contrast in experience was very important to them.  After acquiring the necessary knowledge and skills to use ICT for their academic study, the participants felt increased confidence in their abilities to successfully use ICT and, consequently, felt an increased dependence upon ICT for academic and personal reasons.  Vlad expresses this sense of confidence tangibly, stating that he hasn't felt a need to "learn something new" for the last couple of years because he has "enough background knowledge even with the new stuff coming in".  In the words of Vlad, it is about having built a "foundation" to work from.

> I took a class. I think it was one of the publishing software. I had to use a different one and I kinda knew it was a different type of publishing software. But it was a different company and it was a little bit different. […]  I think the foundation was the same for both programs but the way they went was two different ways. But in a sense their foundation, their basics were the same.
>
> - Vlad

Underlying this sense of confidence is the effort that it took to achieve it.  Like Vlad, the participants did not gain their understanding of ICT without going through some hardship, without asking for help.  In the following reflection, Mafi reflects upon the effort it took him to improve his typing skills and use design programs.

> Personally I find typing faster than writing these days.  It's something that developed over time.  Over the last three years.  I have been trying to type with lots of programs and stuff like that.  But there are sometimes that we are asked to draw some stuff.  It's just way better to take a pencil and paper and draw it than having to use a computer to model it.  Some other times when we have to do some modeling stuff in engineering, first year especially, it was really tough.  Oh just took a bit of time.
>
> - Mafi

Mafi's appreciation for the amount of lived time required to do improve his ICT skills

and his acceptance of overcoming a "tough" lived relationship with ICT emerge as vital

aspects of his lived experience becoming confident in using ICT for his studies.  His

attitude towards this investment in his learning is positive, a perspective that was shared

by the participants as part of gaining confidence in themselves in using ICT.   Irena,

reflecting on how much she has learned, expressed this confident, constructive attitude.

> I am looking at how many things I can do, like using for instance, people are just going to File, Open, Save As, like click on each button.  I already do Control-S or Control-A, like all this stuff that I can do much faster.  On the other hand, I would like to improve typing.  Because here, students take typing and they just type like this.  You know, watching the screen or the book, they just type.  I have problems there.  I have to look at the keys.  But I still consider that I have improved my typing a lot.  I don't want to think negative.  I think positive all the time.  I say, "Yeah, I know how to use it."
>
> - Irena

Abul, solving a problem for one of his peers, stumbles upon a surprising new perspective

of ICT: it's easy to use.

> You can figure it out, you can solve it out and if you don't know, you try it. You know you're not able to do it, so like in maybe in a minute or two I figured it out and I solved the problem, you know. […] I was talking with my room mate.  I said, "Look, if you know the technology is so easy and if you don't know it's really difficult"…In any time it was solved.
>
> - Abul

The satisfaction that this brought to Abul was tremendous.  Being able to solve a problem

for one of his peers was a testament to his abilities and a boon to his self-confidence.

Confidence, in this angle, is also something that the participants felt through the

eyes of others, a lived relation of being seen as competent users of ICT by their peers and

professors.   Irena, waxing on her increasing mastery over using Word, mentions how

satisfying is was for her when her fiancée told her she was better at word processing that

he was.  Feeling appreciated by others can also impact how the participants started to feel

about the technological tools they used.  For Leo, the shift in self-perception and lived

relation with ICT was quite dramatic, from feeling that the computer was not useful, to

something that was "beating" him, to feeling like the computer had become his friend.

> So I learn by the day, you know, everyday something new, yeah. And that is what makes me feel the computer is now my friend. Cuz I feel the satisfaction that I'm able to present something looking nice, you know?  Cuz before then, I never would present my handout like that…I would type everything.  And present it, but now I have the PowerPoint thing, which is looking more presentable, nice.  […] So now I feel I'm also doing justice to the group.  But, by the computer.
> - Leo

For Leo, the days of blame and regret are over.  Whereas before he would have

easily handed over his work to "one of those kids" at the Internet Café, Leo now says he

would rather ask these kids to help him learn how to use the technology himself. Whereas

before he had refused to get an email account, Leo now says that he loves having one.

Whereas before he ran out of a library in Senegal because their digitized library

catalogue, Leo now appreciates the convenience of being able to search for books online

from the comforts of his home.  In the following reflection, one can see the breadth of

this shift in Leo's feelings towards himself and towards the usefulness of ICT.

> What I have come to appreciate here is that, you see, when you are typing it yourself, you have control over the final product.  You would have written something out in hand, but as you are typing, you are reflecting about it and you are changing alongside.  You know. If you give the final product on paper to somebody and he or she is typing it - that is the final product. But you still have a chance as you are typing to change. And I just…and that is the friendliness I again feel.  About the computer.  Knowing it myself.
> - Leo

The computer has become a useful tool for Leo because he has come to "know it"

himself, and to feel he more "control over the final product".  In this relationship with

ICT, one also can see how Leo slips into a mode of dependence: How would he feel if he

no longer had access to a computer to write his papers?     Abul hints at this dependency

in his reflection on how crucial the computer has become in helping him keep organized.

> I am now more organized than before.  Like if I say in that way, by using the
> technology and computer.  Like, I put everything what I am reading or writing,
> and any good journal I liked you know, I am keeping it in my own cabinet, I want
> to keep those.  There is no place like it.  Something like computer, I couldn't have
> done that with those big documents you know full of files and something.
>
> - Abul

By learning how to use a computer, by opening the computer "box" that Abul once

avoided and even left behind because he couldn't see its usefulness to his study, he has

come to depend upon it as part of his work, as part of his self-confidence as a researcher.

Being without access to ICT becomes a new experience, made most evident by

returning home and re-entering a world where ICT still has an uncertain relevance. Leo

and Irena both commented on how challenging it was for them to return home and lack

access to the Internet, Leo calling it a "blackout" and Irena frustrated by a new dilemma.

> Going back home this summer, actually.  There, they have restriction to internet at
> 10 hours/month for a family, I guess.  Which, for us here it's a day. Plus, it's a
> dial up, which is, you get disconnected, you get frustrated.  So, I felt like, "Why
> do I know, why do I have all this knowledge but I can't use it?"
>
> - Irena

Irena's question is another rejoinder to the uncertainty about the usefulness of ICT that

Leo felt in his home country before coming to Canada.  Her frustration isn't because she

hasn't the opportunity to use ICT, nor is she feeling unclear as to what it could be used

for.  Rather, she is frustrated because she knows what ICT can do, but in her home

country, she cannot leverage this knowledge to the extent she now knows is possible.

For the participants, this relationship with ICT has become not only clearly useful,

but a dependency.  Computers, in particular, have become necessary for them to succeed

in their academic study; however, they have also become a part of their day-to-day life.

The computer has become a friend; a tool to help them succeed in their studies, to keep organized and to maintain contact with friends and family.  Idoho's way of expressing this shift in lived relations with ICT is most salient, moving from "fascination to no choice" to saying that he has fallen in love with his computer, or as Chidi describes it, to being addicted to ICT.

> Idoho: If I have something to do, I would rather not go home.  Because once, I sit on my computer, that is the end of the day.  So, I love my computer that much.  I try to stay away from it.
>
> Chidi: He's addicted.

This brings us to a very different place from where this exploration began, a journey that has gone through many different lived experiences the participants have had with ICT.  Understanding the participants' shift towards feeling more confident in their ICT knowledge skills and their more reasoned and dependent usage of ICT has enabled looking at the whole of their experiences from a different horizon of lived meaning.  And yet, while there have emerged many different feelings and lived relations with ICT, peers and professors, there still remains the focused consideration of the question of what it is like for international students with limited or no ICT background to require assistance in dealing with difficulties using ICT.

<div align="center">

**Determined and Distressed:**
**The Light and Shadow of Requiring ICT Assistance**

</div>

In the mundane world of day-to-day ICT use, there exist inherent qualities of competence and possibility that extend towards the ideal of the protagonist user, rather than the victimized one.  In this vein, interpreting the participants' lived experience requiring assistance with ICT can, and should, be seen in both the light of their strength

and the shadow of their weakness.  The participants' lived experiences can be viewed through both the dignity and determination of their stories of perseverance and the distress and self-doubt of their recollections of struggle.

      While the words perseverance and struggle share similarities, there are subtle and important distinctions between them.  To persevere, according to the Collins (2004) dictionary, is to show a continued, steady belief or effort withstanding discouragement or difficulty, often associated with persistence in the achievement of a particular goal or destination. To struggle, while also pertaining to exerting strength and effort in the face of difficulty, is used in a different context.  It is often associated with a more strenuous, laboured exertion, a wrestling or battling, whether physical, psychological or emotional (Collins, 2004).  In concrete terms, to struggle with one's fears, anxiety or uncertainty in the face of difficulties using ICT does not necessarily mean one will persevere over them. In this line of interpretation, each participant could be seen to be in a place somewhere between feeling driven by perseverance or drained by struggle when they experienced moments where they required ICT assistance.

      As an overarching essential theme, perseverance when requiring ICT assistance is expressed by the participants in their determination to learn new technology in order to meet the standard of their new learning environment.  It is expressed by the participants' sense of dignity and self-esteem, their desire to show themselves and others what they are capable of, to do justice to the quality of work expected by their peers and professors.  It is an eagerness to gain control over something they seek to understand, an active nurturing of a lived relation with ICT that is founded in building their knowledge of its utility, its logic and the skills to harness them.  To persevere is when the participants find

the will to face the challenge before them; it is an act of seeing the challenge of learning to type faster or draw using a computer program as an opportunity to grow.  It goes without saying that every participant persevered determinedly at some level when they faced moments of requiring ICT assistance, from waiting for hours on end until someone arrived to help them to recognizing they had to make themselves learn a new program on their own.

Struggling when requiring ICT assistance is more conflicted, marked by the participants' distress in facing embodied and hermeneutic difficulties using ICT, from typing with two fingers to wasting countless hours working on things that could have taken seconds had a simple program function been known.  The essential theme of struggle is found within the participants' stories of feeling like the computer is something that can overpower them, something that is withholding its secrets or logic or something that has been forced upon them.   Struggle reveals itself in feeling defeated, feeling a level of nervousness and anxiety that leads to avoiding certain technologies, bursting into tears, a steadily increasing heartbeat, poor eating habits, and illness.  The participants express this struggle when requiring ICT assistance in their fear or avoidance of being in an empty lab, in their battle to keep their self-esteem and personal dignity in the face of their peers and professors, and in wrestling with wanting to give up and go back home where things would be easier, more understandable and predictable.   To feel this struggle is to feel a sense of emotional and mental exertion to a point where helplessness creeps in; when they acknowledge being baffled by, stuck or lost in the problem they face with ICT; when this awareness is heightened by not having enough time, enough energy, nor enough personal knowledge and skill to solve the problem without assistance.

Somewhere on this horizon of perseverance and struggle, of determination and distress, lies the realm of help seeking. Somewhere on this horizon is where the participants sought assistance to develop their capacity with ICT and succeed in their studies, where they called out for help in the wilderness of their confusion and isolation. They requested and received assistance with ICT and managed to move from feeling challenged, uncertain or vulnerable to feeling confident and dependent upon ICT. They sought help and found it or they were lost in the labyrinth of ICT and were rescued from it. And yet, how is it that some participants became so lost and so distressed and not others? How and why did or didn't they reach out for help? What did it feel like for them to request and receive assistance?

These questions are critical to ask in order to fully comprehend the significance of the pedagogical imperative of this thesis. For, an understanding of the lived experience of requiring ICT assistance cannot alone lead to a deeper awareness of how to tactfully address the unique needs of international students with little or no background with ICT. Embedded in the participants' experiences of requiring ICT assistance is also their unique feelings about and approach to requesting assistance. In another different but related vein, when help was sought and given, it is also crucial to understand how the participants felt about the way in which it was provided. In this way, the complete horizon of the participants' lived meaning from their experiences requiring, requesting and receiving assistance can be seen. From that panoramic vista, we can begin to ask how post-secondary educators and student support professionals can nurture a learning environment that is both encouraging and responsive to international students'

determination to succeed in using ICT and that is proactive and sensitive in dealing with

their potential distress at not meeting the standards required.

**Chapter 5:**
**International Students' Lived Experience Requesting and Receiving ICT Assistance**

*When I first came here, I didn't know anybody, so going in and bothering the lab advisor more than three times in an hour will be bothersome. So I would sit and figure out that thing myself. And, you know, also people outside, people in the lab that would see me coming and asking for help more than three times in an hour that they would think I'm stupid or something. They would look and see, "Why is that person asking for help so many times?"*

- *Vlad*

**Presumed and Paradoxical:**
**Posing the Phenomenological Question about ICT Help Seeking**

In a university setting, where there are lab assistants, IT Help Desks, library reference desks, advisors and professors, amongst other available sources of assistance, it is often assumed that international students have enough ICT help available to succeed in their studies. Any complaint otherwise may be presumed to be a failure of communications on behalf of institution or a lack of motivation or interest on behalf of international students. To imagine an international student facing a struggle with ICT and reaching a point of exasperation due to a lack of ICT help when so much help is available would seem incongruous. In such a case, one might wonder if or when this international student asked for help, who he or she approached, how he or she felt about asking for this help, what type of help he or she was given and he or she felt when receiving it.

This chapter explores the phenomenological question, "What was this international student's lived experience requesting and receiving ICT assistance?" The next pages reach into the horizon of lived meaning that the participants shared when reflecting upon this question, international students who had little or no ICT experience

before coming to Canada for their post-secondary studies.  The first part of the chapter

focuses on requiring ICT assistance, examining the lived meaning of both difficult and

positive lived experiences.  The second part of the chapter then deals with receiving ICT

assistance, examining the lived meaning of receiving poor and good help, respectively.

The last part of the chapter provides a summary of the particular essences of requiring

and receiving ICT, as shared through the anecdotes and reflections of the participants in

this study.  Personal anecdotes, excerpts from literature and analogies with certain works

of art are also interspersed throughout the chapter.

## Lived Meaning of Requesting ICT Assistance

**Insecure and Unfamiliar:**
**Exploring Difficult Lived Experiences Requesting ICT Assistance**

The act of requesting ICT assistance shifts away from a central focus on the

technology to relations with others.  The intention is to overcome a difficulty faced with

ICT but also to make a connection with another person to help solve a problem.   One

might assume that how the participants felt when requiring ICT assistance, from

determination to distress, would reveal itself in their search for help.  And yet, this is not

necessarily the case, as some participants may have felt self-motivated and excited by the

challenge to learn new things, but not as confident in asking for assistance.   Conversely,

a participant might have felt uncertain and vulnerable in the face of daunting tasks with

ICT, but quite secure in reaching out to others.

From the anecdotes shared by the participants, past experience with help seeking

and culturally rooted ways of requesting assistance certainly affected their perceptions of

their lived experiences seeking ICT assistance.  As an overarching theme, however, it is

axiomatic to state that the participants experienced "cultural differences".  While the

participants did indeed describe differences in culturally-based approaches to help

seeking, the lived experience of these differences in the act of requesting help emerges in

a less categorical manner.  Upon reflection and hermeneutic analysis, an emotional and

embodied horizon of meaning of the participants' help seeking can be seen; one that

reveals a compounded, often disconcerting insecurity and unfamiliarity with who, where

and how to ask for help, regardless of how confident the participants might have

normally felt in similar circumstances in their home country.

One common reflection that the participants had upon their experience of

requesting ICT assistance in their new learning environment related to the formality

involved in help giving.   For Aline, this change in her learning environment was

inconsistent with her expectations.

> Well, here tend to be more professional.  [B]ack home everybody is laid back.  So when you ask for help it's not that bad.  So when you go to a desk like that one, like the one downstairs and you ask for help, they just give you the one-two-three, the basics.  And you're supposed to, I dunno…It's not very informative. […] I think they should be able to explain themselves and they should be able to go out and help people when they need help.  Like, they shouldn't just tell you what you're supposed to do.  They should be there to do it for you.
>
> - Aline

Aline and Leo, as well as Oba, Mafi, Chidi and Niyi all come places where professional

help was either "laid back" or a transactional experience involving payment for services.

This is a variance that could account for Aline's disorientation and dissatisfaction in her

new learning environment.   Aline even stated at one point that from her experience

interacting with professional helpers on campus, she didn't understand "why they get

paid".  Vlad also felt a sense of disappointment, but for different reasons and expressed in

a more tolerant tone.

> I noticed a difference, because I come mostly from a collectivistic society where people, you know, share everything. If my neighbour had a computer we would share it and, you know, we would go and spend time, and here it's more individualized. So if you need to get help here, you need to really set an appointment or something and talk in advance about getting help.   While back at home it will be impromptu. You just come in and share the computer, and uh, it's not that you have to say, "Look, I'll come in, uh, five o'clock."  There's nothing wrong with it, it's just that you respect somebody's time.
>
> - Vlad

Whereas before Vlad felt he could "spend" time with people to learn ICT, in his new environment he feels he must now "respect" people's time through setting appointments: a convention that, while he seems to accept, is something that he eventually finds ways to sidestep.  Abul also speaks of dealing with this adaptation, but unlike Vlad he is openly resistant, stating that he has never set an appointment time yet.  Leo also bucks against what he described as a more individualistic and formalized learning environment in Canada, a stark contrast to his home country.   He reflected,

> When I started asking for help, for example, I didn't have to meet someone for some time. I just saw someone working on the computer and I thought this is a student who should be ready to help me.  […]  It's part of the culture.  Even from the traditional background, people when were farmers would ask other people to come and work on their farm.  […]  So asking for help is something people do.  Not shy away from this need, this difficulty.  Come and give me help.
>
> - Leo

Leo's natural inclination to seek help is a trait that enabled him to eventually find assistance when he didn't know who to ask.  At the same time, it was a hit-and-miss approach that left him feeling vulnerable on more than one occasion.  For the participants who did not share this ease with help seeking, unfamiliarity with who to ask or with accessing formal help is experienced in an inhibited, conflicted way.  This inner discord is candidly expressed by Irena.

>Well, I would say, first, I didn't know anybody official paid to do…to teach me how to use computers […]  There wasn't anybody…[…] [I]n my culture, you do not ask professors, or you do not ask seniors I would say.  You try and find out the things for yourself with your friends, with your parents, whoever you have close, and then if that doesn't work, then you might go to the professor and ask.  But if you do that, they might think, "Why are you here?  It's not your place if you don't know what you're doing."
>
>                                                                                              - Irena

Not knowing who to ask, or being wary of asking others for assistance for whatever reason, is a lived experience that led some participants to feel isolated or distressed, exacerbated by whatever other external pressures may have existed, such as a passed deadline.  Samiya described feeling like an "outsider" in her part-time studies as a Master's student, since she worked off-hours at the computer lab when there is no help available.  Abul described feeling nervous and helpless because of not knowing where to get help, and compared this to the "good feelings" he has when he knows whom he can ask for assistance.  And yet, even knowing who to ask did not necessarily relieve the participants' feelings of unfamiliarity during the early part of their studies in Canada.

For Irena, knowing what can be asked and how to request assistance was just as unfamiliar and perplexing.  She recounted an experience where she was refused a sincere request for help because the lab assistant felt it would be cheating; a deep contrast to her experience in her country where "you can buy the papers from the professors".  Irena described feeling confused and somewhat judged by the lab assistant's remarks, wondering what the line was between asking for ICT assistance and asking someone to do her assignment.  She ascribed some of this confusion to a language and cultural barrier, where she feels people misunderstood her or mistook her intonation or her way of asking for help as being a demand rather than a request.

> [H]ere if people ask you if you want anything and you say "no" then you won't get it.  In my culture, you have to say "no" for the first three times at least to be polite and then you say "Yes, OK".  Here, I said "no" my first time and with my landlady and she said, "OK, bye."  That was it, and I said, "Oh, I wanted that!"
>
> - Irena

Irena, like Aline, was disoriented and disappointed by her experience in help seeking because what she expected to happen didn't happen.  Not knowing exactly who, how and what to ask and trying to adapt to a foreign and unpredictable help seeking environment can be quite difficult to deal with.  Such experiences can leave the participants feeling like they must rely on themselves or uncertain whether their customary help seeking approach will be successful.  As demonstrated by Vlad's reflections on his first months in Canada as an undergraduate student, these feelings are not mutually exclusive and can also be connected with other lived relations, such as feeling timid or bothersome.

> [I]t goes up to the point where you can't move forward and then you know you have to ask. Maybe that timidity and mixes with your background knowledge and you try to solve the problem with your previous acquired knowledge and it doesn't work and then, you know, you have to overcome your feelings and just go and ask.
>
> - Vlad

Vlad's reflection on his struggle to "overcome his feelings" and seek ICT assistance from a lab assistant is a theme that was strongly evident in the anecdotes shared by the participants.  Samiya reflected that she would prefer to seek assistance from a lab assistant for more difficult ICT problems she faces since "he's not going to insult me", but at the same time says she wouldn't seek such help for small things because she doesn't want to "make a fool of myself".  Her insecurity is not attributed to her level of skill as she relates in the following statement.

> Just this hesitation that like I can't keep asking this…See, I don't want to make myself look like kind of old or something in front of others or whatever…That they…"Oh, she didn't understand" sort of thing…
>
> <div align="right">- Samiya</div>

Samiya's fear of being considered disadvantaged with ICT because of her age suggests how complex the feelings around help seeking for international students can be. For example, Abul spoke of his concern early on in his university studies that if he demonstrated his lack of abilities in ICT in front of an instructor he might have had marks deducted or have made the wrong impression.  Abul also described avoiding asking lab advisors for assistance because he doesn't want to "show his weakness" to people he doesn't know.  In a similar vein, Idoho spoke of feeling insecure asking lab assistants because they can make her "feel stupid" in contrast to their high level of knowledge and skills in ICT.

Another important lived existential that emerged from the participants' reflections on help seeking is associated with lived time.  In particular, they descirbe feeling there is a limitation upon how much time they can demand.  Vlad asserted that "[T]here's a certain number of times you can go and ask for help and then the person will get tired of you."  For Vlad, asking for help too many times from a lab advisor made him feel that he was distracting him or her away from his own work, which, ironically, is to provide help to students.  Aline also made a similar comment.

> [I]t's also like a personal thing when you don't understand something, you ask the first time, and somebody tries and shows, and then you ask the second time and they show you the same thing.  When you ask the third time, I mean, like, the person will be angry by then, like, "What are you stupid or something?"
>
> <div align="right">- Aline</div>

For both Aline and Vlad, there is a perceived limit to how much they can ask of a lab advisor before being seen as tiresome or unintelligent.  In Aline's unambiguous words, if

she is facing a difficulty with technology, she would "probably ask around first, somewhere a friend who knows how to use this and then I drag them with me to go use it and if there's no one then I probably have to do the last alternative and go to the front desk."

For an international student to speak of official help as the "last alternative" might be quite surprising to many post-secondary ICT help providers. However, if we seriously consider the underlying insecure, unfamiliarity expressed by the participants in this study, the existential meaning of their lived experience with ICT can come into sharper focus. Statements such as Aline's can resonate more meaningfully. To imagine an international student facing a struggle with using ICT and reaching a point of exasperation and defeat and, at the same time, surrounded by people paid to support him or her can become more understandable. In this light, as in Edward Munch's famous existential series of paintings entitled "The Scream", the international student stands alone, lost, anxious, afraid, his or her call for help as if swallowed in a vacuous tunnel, while in the background, one can see passers-by, seemingly unaware of his or her suffering. Why doesn't the student turn around and ask someone to help him or her? Why does the student stand there, while peers mill about in the hallways, while support staff await his or her request at their stations? Unfamiliarity with their surroundings and insecurity in the face of requesting assistance appear as new obstacles for the participants, in a sense concealing them, or concealing from them, the support that was available.

This despondent depiction of the lived experience of international students requesting ICT assistance points to a pressing issue in internationalization on campuses in North America: the perceived and actual isolation of international students, their

segregation into cultural, ethnic, religious or national groups and the corresponding lack of meaningful opportunities for cross-cultural interactions that lead to diverse social networks.  While it may be difficult to comprehend the scope of feelings that can come with such potential isolation and segregation, I can certainly relate to such experiences.  I remember my first university classes in Montreal, and being shocked at how quickly the room emptied when the class was over.  As a newcomer to the city, in a university and program that attracted primarily Montreal residents, it took a long time to make connections that lasted beyond a class discussion or small group assignment.  As a high school exchange student in Germany, I can easily recall the melancholic and lonely days I spent roaming the hallways of my gymnasium and the streets of Oberursel before making friends, insecure of my awkward behaviour and poor language skills. I was genuinely grateful for our exchange student retreats, where we would burst open like breached dams, speak in English, laugh and share some of the best and most difficult times of our lives.

One can only imagine how some international students must experience the relatively anonymous and individualistic culture of most post-secondary environments in North America.  Considering the lived meaning of the reflections shared by the participants in this study, it may be no surprise to learn that they all spoke of their dependence upon familiar, lived relations with colleagues, peers, friends and family when requesting help to deal with ICT issues early on in their studies.  It may also be no surprise to discover that, once they felt they had acclimatized to the help seeking conventions of their new learning environment, they became more comfortable requesting assistance. This other side to requesting ICT assistance presents a markedly

different lived experience, one that is described in a much more contented and confident

language.

**Self-Assured and Comfortable:**
**Exploring Positive Lived Experiences Requesting ICT Assistance**

In contrast to their feelings of insecurity and unfamiliarity, the participants

recounted feelings of self-assuredness and comfort requesting help from family and

carefully selected peers and professional helpers.  For Samiya, this reliance was upon her

husband.

> I think the person who is like kind of closest to you and we are living in the same
> house. We share time together and I think that a person goes to that person like
> who can help you and has expertise of that. [I]n my case my husband is a
> computer professional so I asked him. But maybe my friend or my sister who
> knows about the computer I would have gone to them.  Like it depends who can
> help you…And where do you feel comfortable and other person also has time for
> you.
>
> <div align="right">- Samiya</div>

Irena's fiancée and Samiya's husband were sources of support they could count on

without worrying about rejection or miscommunication.  In a similar vein, Abul spoke of

his dependency upon his Bangladeshi roommate while he was studying for his

undergraduate degree overseas, a friend he said made him feel in his "comfort zone".

Vlad also spoke of contacting friends from home; a practice that would hardly have been

considered feasible a generation ago.

For the most part, however, the participants didn't come to Canada with family or

friends, they didn't develop close emotional ties early on in their studies, nor did they

spend countless hours receiving help from friends and family back home.  They did set

up an informal network of assistance, though, one that was based upon a lived relation to

their immediate surroundings and upon their determination, through their observations of

others, of who they felt would be helpful.  In this respect, their help seeking was self-

assured and self-aware, grounded in their sense of place and relations with others.   Leo

reflected,

> I only felt I could say good morning to somebody in my department, because we are a family now. […] [I] felt this was my home, this is where I belong. I'm creating a family here, so I should be able to ask for others' help. But not outside this department.  Outside this department then I would need to know you [laughs]. […] I would not, I just didn't make the effort to ask anybody else outside the department.  Well, I thought I had come into a culture where you don't just talk to foreigners, strangers [laughs].  But in this department, they see me, they feel I'm part of them, and so I felt at ease to ask for help.
>
> - Leo

Leo's sense that in his department he feels people "see him" and "feel that he's part of

them" is quite striking.  His internal sense of place and relationship is rooted in the

creation of what he calls his "family" and even extended into his lived relationship with

the technology itself, where he felt ties to a particular computer where he would always

go "to do serious work".

   Abul also described feeling different when he sought help at other faculties than his

own, connecting his deep relationship with his department in very tangible terms.

> Oh, it's almost like 2 and half years, almost 3 years.  And if I calculate my time, you know, I am spending in this building.  I think I spend most, like, more than any other, even Faculty.  Every day I come to school and stay here 9 to 9, sometimes more.  And maybe the reason like I told you before, I don't have any family or anything you know.  This studies are my only focus. And like other people have other things to do, like at home or something, but I don't have.  So I feel comfort here.
>
> - Abul

Abul's assertions in this anecdote poignantly describe the intensity of his connection to

the lived space of his department and subsequently to the people who work there.   As

stated earlier, while Abul was aware of the conventions for requesting help in North

America, namely the explicit or implicit expectation to make appointments or go to a lab

advisor, he didn't feel comfortable with this.  The way in which he avoided these

conventions was to follow up with those people he observed as being helpful in his

immediate surroundings.  He reflected on how he came to develop a relationship with one

the most important people in his social network.

> Her office is not far away from mine you know.  Whenever we met, "Hi, Hello, Hi Marion" And, she is always helpful, you know.  Like not only me.  I saw other people going and taking help from her.  So, it also give me feeling that she is helpful.
>
> - Abul

In contrast to passive insecurity in the shadow of potential negative body

language or verbal reactions to their request for help, the participants, like Abul,

described a more proactive engagement with selecting their potential helpers.  Why

would Abul or Leo want to feel like they couldn't simply ask a colleague down the hall

for ICT assistance? To them, their department is not just a workplace, but a lived space

that embodies the lived meaning of creating new home, a place where they are

developing a sense of comfort and family.  In this vein, Leo described a time when he

"handpicked" someone from a lab in his department: first because of his comfort level in

his known environment; and second, because when this person was approached by others,

Leo observed his friendly and inviting nature.   He decided, "This man will come to my

help" and when he finally did ask him, he was right.  Aline provided a similar, though

more materialistic description of how she determines who she will ask for help.

> I specifically asked this person when I came here for my address, what to give my address.  When I sat down, I looked around, you know, and I looked at this person. I think he was wearing cargo pants for some reason…pants with pockets. And they were wearing some funny t-shirt, and I dunno. I dunno.  There just is something about that person, whether he looked like he was a nice person, and so I asked.
>
> - Aline

Aline and Leo described selecting their potential help providers by keeping within what Abul termed the "comfort zone". In Aline's words, asking a peer for help is more appealing to her because they "might be going through the same thing" and they may be a better help provider because "[i]t's casual…it's more informal…it's almost reliable, almost reliable…but it's just, it's just comfortable."

I remember a time working on a course assignment and feeling quite insecure about my lack of knowledge and skills utilizing a website development program. I tried asking the lab assistant, but the number of questions I had was too great and when she tried to help she was also uncertain what to do. I was hesitant to ask strangers, because like Abul, I did not want to expose how little I knew and, like Vlad, I was not convinced they could help anyway. I was reticent to ask my peers and reveal my lack of ICT skills but also because I was concerned that I would be a drain on their time. The next day, I decided to ask someone who worked in the department, but did not have official status as an ICT help provider for students. I knew she had many responsibilities, but also that she was quite knowledgeable and kind, having met her through our graduate program orientation. She was someone who always greeted me with a smile and who everyone spoke of with the respect and affection reserved for a consistently thoughtful person. When I approached her, I remember feeling relieved by the privacy of her office and feeling unconcerned that she might judge me harshly or that my incompetence would leak into my relations with peers or professors. Just as importantly, I felt good that I had tried to do the assignment on my own and that I came to her not with a blank slate, but with a set of very specific questions. Through trial and error, I felt had attained level of

self-assuredness; I knew what help I needed, I knew how to ask for it and I knew who would know the answer.

For the participants in this study, feeling more comfortable asking for assistance with ICT included this lived experience of preparatory thinking and reflection.  Vlad was one of the participants who clearly expressed this shift towards self-assuredness from timidity, using a language that is both proactive and conscientious.

> I think it comes with experience, you ask for something, and then they would just go over or won't give you enough.  I learned how to set the limit, and say just show me this, and this and this, so I know exactly what I need and what I'll get from them.  […] I know that they have their own time and I don't wanna use their time.  So if I need their help for a couple minutes, I would just say "Show me this and this and this, and then if I need something extra I'll come back."  Yeah, I learned to be conscious, because I asked a couple of times and they didn't have time to help.  So I thought, OK, if I am very specific and I outline the limits, the boundaries of what I need, then I can get specific help other than just, go all over, be all over the page and learn that thing out of it.
>
> <div align="right">- Vlad</div>

Vlad's description of creating "boundaries" in order to alleviate the potential concern that he might overburden his help providers reveals his mixed feelings about help seeking.  In practical terms, this meant that "before going and asking questions, I sit down and think it over and make sure I get everything in there not to go and ask them again for the second time."  A subtle, yet crucial adjustment in Vlad's language and intention is evident in these words – words that seem to mirror the insecure hesitation he felt early on in his studies, and at the same time, words that evoke a more intentional, self-directed sense of lived relationship with those he feels he can ask for help.  A testament to this shift in lived meaning is Vlad's assertion that once he becomes more familiar with people he feels comfortable approaching for help, he sidesteps the practice of setting up appointments; something he found disagreeable from the outset.

Writing questions ahead of requesting formal ICT assistance was also something that Irena spoke of doing, although for a different reason. Irena felt that listing her questions and having her fiancée review them beforehand would help her feel more assured she was requesting the right help and using the proper language to do so. Irena's grounded and detailed description of how she adapted her to approach help seeking is, like Vlad's, analytical and strategic, intertwined with and rooted by an increased sense of comfort and clarity around her relationships with her colleagues and mentors.

> Well, you can ask your colleagues, like "Do you know how to insert a graph in Word?" and they would know how to do it and they….You would get a really well, a good answer, right? But if you're asking specific to your areas, specific to your assignment, this colleague that is in your lab…Like I said, we have these few qualitative researchers. I'm quantitative. They would never know how to do these graphs with four axes, never done it, they don't care…It's specific and trust you that the answer is the right answer. […] At the beginning I would just go to my colleagues because I would feel more comfortable. But now I'm thinking, "OK, I'm past this stage. I know what I can ask my colleagues. I know what I can ask my professors."
>
> - Irena

The image of a self-assured and comfortable international student requesting help is quite different from the picture of participants struggling to overcome insecurity and seek a semblance of familiarity in a foreign environment with foreign technology tools. Reflections such as Vlad's and Irena's evoke a completely different image than that of the faceless, anguished subject in "The Scream". The anecdotes and thoughts shared by the participants present a more connected and contented sense of communion with others close to them and with the lived space they inhabit as part of their studies. The blurred shadows in "The Scream" come into focus, the subject's arms relax, her face becomes brighter and clearer and the landscape more inviting.

This shift in the participants' lived meaning in requesting ICT assistance makes me think of Alex Colville's painting "To Prince Edward Island".  In this work of art, the main subject is close up, just off-centre, poised and looking forward through her binoculars.  In the background are a blue sky with traces of clouds, crisp lines of the ship and the relaxed depiction of the woman's fellow traveler, his face hidden behind her figure.  Colville's image is almost like a photograph, but the lack of precise detail and the inclusion of perfect lines and shadows create a more imagined world, like a treasured, well kept memory, or like something not entirely known, but deeply longed for.  Unlike "The Scream" the main subject is not oblivious to who is behind her; rather she seems close to him, insinuated in his comfortable pose.  Neither does she seem lost or helpless; rather, she is looking ahead, scouting in the distance, into the onlooker of the painting. Colville's painting does not draw one to sense pity or concern, feeling like the character cannot be reached; rather we are intrigued and calmed, feeling like the character is reaching out, seeking what lies ahead, looking into our eyes, examining our lives, however constrained by magnified and peripheral vision.

If we consider the contrastive lived meaning of both requiring and requesting ICT for the participants, it is reasonable to conclude that their lived experience *receiving* ICT assistance may also imbue a spectrum of lived meaning as well.  With this comes an added aspect: the actions of the helper and how or she approaches help giving.  Thus, as a framework, a fruitful analysis can be gained by exploring how the participants described their lived experiences receiving what they described as "poor" or "good" ICT assistance.

## Lived Meaning of Receiving ICT Assistance

**Condescended and Inconspicuous:**
**Exploring the Lived Experience of Receiving Poor Help**

In fictional literature about immigrants' experiences settling in their new country, ineffective or offensive help giving is an incident that can quickly transform a relatively obscure, trivial or banal situation, gesture, or conversation into a consequential, potentially devastating moment. Being patronized in a help receiving situation is a common example of poor help that is depicted in stories about the lives of new immigrants, a demeaning lived experience that can be confusing and emotionally scarring. In a short story from David Bezmogis' (2004) book, *Natasha and other stories*, Ron Berman, the father of the main character, experiences a pretentious form of help giving that leaves him and his family hopeful, yet perplexed and tacitly disgraced. A massage therapist of repute in his country, Ron struggles to restart a viable business while working in a factory, and seeks the help of Dr. Kornblum, a well known doctor within his cultural community. At the end of a strained dinner and ambiguous massage session with Dr. Kornblum's wife, Ron is assured that clients will be sent his way and that "[B]efore he knew it, he would be out of the chocolate bar factory". When the Bermans are on their way, the Kornblums return the cake the Bermans had brought as a gift, saying that they wouldn't eat it because it wasn't kosher. Ron is deeply affected by this and tells his son, the narrator of the story, to throw out the cake, a memory that he carries with him like a dark secret. For his father, his concealed insecurity about seeking help is revealed, his worst supposition confirmed.

From what was shared by the participants, such a confirmation that their insecurity was warranted, that some people do indeed perceive them as "stupid" or

incompetent in requesting ICT assistance was by far their most unsettling lived

experience they shared.  This confirmation may not have been directly stated as such; it

might have been experienced as body language or subtle statements that made the

participants feel as if they have been affronted or condescended.  The participants'

reactions to such experiences ranged from avoidance to anger, often without resolution.

The focus group participants provided a good example of this span of emotions

associated with receiving condescending help.

> Idoho:  The classmates that I stop going to ask for help, because I have asked
> them for help a couple of times and they kind of response I got from them wasn't
> exactly welcoming.  And, I wouldn't want to go and ask those people again,
> cause…
> Chidi:  Some of them, well they just like explain to you as if, it's like…
> Oba:  well, you are supposed to know that…
> Chidi:  yeah, exactly, exactly…
> Idoho: And you feel stupid.
> Chidi: "I expect you to know this already." And I will be like, I feel just left out.

While the flow of this dialogue evoked a shared sense of how condescending some help

can be, Idoho responded to such experiences by avoiding such people and Chidi looked

inward and felt isolated.   Mafi expressed this complexity of feelings in relation to what

can be experienced as unaccommodating reactions to requests for assistance.

> You ask the person once.  The person doesn't help before in the past.  And the
> second time, maybe the help is not forthcoming.  You just automatically, your
> mind zeroes against this person. Sorry, I am not lying.  So sometimes it's a matter
> of I'd rather rot and have a lot of problems than thinking of asking this person.
> Sometimes fright comes in to, or sometimes you just can't help it.
>
>                                                                      - Mafi

Like Idoho, Mafi's reaction to being ignored in his request for assistance was to avoid, or

"zero against" the person; a response based on fear or an uncontrollable need for

emotional distance.

Samiya and Irena related specific interactions where they felt genuinely

mistreated. Samiya recounted how she felt a classmate "didn't behave very well" and

made her feel "insulted" because she undermined her background education in India.

> I felt like that the lady is trying to say that whatever background I have is totally different from what they have in Canada.  But my feeling was like two experiences can't be same, like, education I got in India and she got in Canada. All the courses can't be same. But if she has mastery over a particular area or something which I don't understand it doesn't mean that I'm inferior in every way.  Like maybe I have something which she doesn't have.  Like I'm not going to help her…Right so everybody has like black side and negative side right? […] I don't know how to say express my feeling what I felt at that time but I really felt bad and I never spoke to her after for help.  No, but simple "hello, hi" is okay. But I never asked her for help. […] Maybe if she would have treated me in a nice way.
>
> - Samiya

Samiya's sense that she was unfairly judged as being "inferior" is, in the best case, a

possible miscommunication.  In the worst case, it can be a form of stereotyping that,

while potentially benign can also be experienced by as a malignant manifestation of

racism.   Irena's recollection of one of her first experiences in Canada the damaging lived

experiences that international students can experience in receiving poor help in the post-

secondary context.

> I had a really bad experience in my first university. People said that they helped too much and that I wasn't prepared to be in a Master's program.  I had no idea how to use the equipment, I had no idea how use the computer and I came and asked for help.  In my face, they didn't say anything.  They were, I thought they were nice and polite.  They tried to help me. I was too embarrassed to ask twice back then.  In my culture, you don't really ask twice.  You got it or you didn't, so you go home and try to figure it out yourself.  But I learned it here, it is not that way.  […] It was with another graduate student from my class and then another graduate student.  She wasn't in my class.  She just offered to help, actually. I didn't even ask her.  […]  I asked them, "Would you like to help me?" And you know how people are here so nice and polite and they say, "Oh, if you have more questions come and ask, if you want more help come and ask" and then you go and ask and they say things like, "She asks me too much."  You want to be nice or you don't want to be nice?  [….] I didn't understand it at the beginning.  They called me "high maintenance". And, I probably was and as an international

student, I think everybody is high maintenance because you come in a culture that you don't know anything about.

- Irena

This experience affected Irena in profound ways. The double-edged response of her peers in the face of her repeated requests for assistance confirmed her insecurity that she was perceived as incompetent or needy. From that point forward, she no longer requested help from her peers and found herself isolated, nervous and anxious in the face of requiring ICT assistance, to the point that she became physically ill. Leo also recounted feelings of distress due to being refused help by a peer, in his case because the person was too busy. It was an experience that left him feeling "abandoned", and "hurting", no matter how much he, like Irena, might have been able to rationalize the situation. Stories like Irena's evoke an intense emotional reaction; however, the participants' anecdotes about receiving what they felt was poor help revolved more prominently around less volatile experiences. Rather, they depict lived relations involving feeling treated inconspicuously, "like everyone else", feeling superficially addressed or being rushed through a help request, spoken to quickly and without adequate demonstration or practice to check their comprehension.

In the novel, *Homer in Flight*, by Rabindranath Maharaj (1997), the main character, Homer struggles with this kind of ineffective help receiving experience. He feels incapable of figuring out how to do his new job at a factory largely due to his supervisor's incompetence as a supervisor. He writes in his journal,

> I know now I will never learn anything about this batching job. The only thing I know so far is that there are eight tanks, and these mixtures pass through them through hundreds of pipes where they are agitated, aerated, homogenized and god knows what else. There are about five instrument panels where the pipes are attached, and I am supposed to hook up these pipes so that the mixture will flow into the correct tank. Then I have to identify the correct pipe from the hundreds

on the ceiling and rush pell-mell to the other panels and do the same thing. So far
I haven't done any actual hooking up. And I have to state that the chief batcher,
Ravindra, makes matters worse. He doesn't explain anything. All he says is
"Watch me" in his careful voice while he is screwing and unscrewing. But about
two days ago he repeated B.R. Cockburn's spiteful warning about every mistake
costing the company ten thousand dollars…

(Maharaj, 1997, p.62-63)

Ravindra's lack of patience and explanation and his constant reminders to Homer to not

make a mistake create a losing battle for Homer. Gradually, Homer's training comes to

an end and he is assigned the most arduous, least respected work in the factory. His

failure to learn how to be a "batcher" may have partially rested with him; however his

fellow workers empathize with his situation, quite succinctly describing what it is like to

have Ravindra as a trainer.

On their way back to the batching unit, Scrunch asked, "So how you making out
with the guy from India?"
"Ravindra? Okay, I suppose. He doesn't say much."
"Yeah, He's a good guy but he doesn't explain nothing. Not really the best
trainer to have. I always feel that he's thinking of something else."

- (Maharaj, 1997, p. 63)

Homer's disillusionment by his failure to learn a rather menial job sinks what remains of

the self-confidence and purpose he had originally brought with him as a newcomer to

Toronto. As the reader of the story, you can feel the humiliation of his marginalization

and the frustrating, insidious injustice of receiving half-hearted, inattentive and even

threatening mentorship.

For the participants in this study, such underlying feelings of being dismissed or

mistreated through incomplete help provision are experienced in manifold ways. For

Vlad, inconspicuousness was experienced in a moment when he requested for a screw for

his computer from an IT Help Desk and was told he would have to buy a box. In Vlad's

mind, this refusal to grant his request was because he was new; if he had known the

people at the Help Desk he felt they would have given him one of their "thousand

screws" he felt they must have had.  Most intensely however, the participants recounted

experiences with receiving poor help where their help provider assumes, without

reflection or active listening, a level of knowledge and skill that surpasses their abilities

and comprehension.    Oba recounts how it felt for her to request help from the IT Help

Desk at her university.

> [T]here was a time I couldn't connect my computer to the school internet.  So I
> took it to [IT help] and the guy was like, "Oh, you have to just take this…You
> have to go blah, blah, blah, blah…" I am like, "I don't know that!"   Like, can you
> just slow down and like talk, you know.
>
> <div align="right">- Oba</div>

If Oba enters this help request feeling insecure, then asking her help provider to slow

down might not be something she is comfortable doing.  She also may have lost her

confidence that this person would be able to help her in any case, as he or she might not

be able to explain at her level, something that she says is often the case when she seeks

"official" help.  Aline provides a poignant anecdote of how this kind of help can

incrementally result in absolute exasperation.

> I don't know how to use the Internet, you see…They turn the computer towards
> you, "Just click on that and then after that you type in your password and your ID,
> and you're good to go."  And you'd be like…Right…I don't have a computer and
> ID. "Oh, just, you can't use these computers without a computing ID.  So you
> have to go to the something, something services and you have to get it from
> there". Be like, OK, I don't know where that is…And then you be like…Oh,
> OK…" It's in the something, something, something, um, two floors." Then be
> like, "Thank you". By then you probably will give up, like, OK…"Thank you."
> […]  You first forget, not even that, you have to go get your computer pass ID.
> By the time you come back and try to use the computer you won't know what you
> have do [laughter].  And if you go back, she'll probably look at you, be like,
> "You've forgotten already?"
>
> <div align="right">-   Aline</div>

For Oba and Aline, who studied in English for most of their lives, the issue they faced with receiving poor ICT help is felt strongly in terms of how attentively and thoroughly their help providers responded to their request.  For Leo, Vlad and Irena, they had the added struggle with adapting to studying in their second or third language, including their challenge to assimilate new vocabulary associated with ICT.  Leo recounts a story where, like Oba, his internal struggle resulted in restricting further requests of an official help provider.

> With these people, I deal with them as very official and sometimes when they are helping me, I do not want to take too much of their time.  There are some things initially I didn't understand, I didn't insist on, saying oh, "I didn't understand it", "OK. Fine, fine."  They give me the help then they go away.  Because I feel others might need their help. I don't have to engage their time, you know.  But with some peers, then I take my time and I continue to ask and I continue to ask, sometimes I…you know, I asked someone once to draw even for me.  The lab assistant, I would not…I would just ask, "How do you do this?"  And then they would say "This, this, this, this"…And there were instances where I didn't understand what they were saying...But with a peer, if I don't understand, I say, "Please can you draw it for me?"
>
> - Leo

Consequent to feeling like he is a drain upon the time of the lab assistants, Leo conceals his need for ICT help from them and deepens his reliance on peers.   Feeling conflicted in interacting with a lab assistant is also described poignantly by Irena.  She related an anecdote when she sought help learning how to use PowerPoint and was overwhelmed by the lab advisor's string of new vocabulary and actions required to manipulate the computer software.

> At the beginning, you would say something in English and it would just go out. In one ear out of the other ear.  Because it takes a time for my brain to process and translate and understand the meaning of the words you are saying and most of the time that it is so much information it would just "shhooo" out of my brain.  And they might have said it once, twice, three times, I don't know.  […]  Trying to read the letters, because it takes a long time to read them.  And this guy would try to help me, "OK, Control-M that's a new slide".  He would do it right away and I

was trying to see what keys he would press, I was trying to see what happens with the screen and understand his explanation.  All this two different languages here, foreign languages, trying to translate all in my language, trying to get back to him. [A]fter he left, I would go and try and do whatever he showed me and I would catch most of it, but some of them I would say, "Oh, I have to ask him again." Because maybe he didn't realize that it takes me awhile to see what he does with his fingers, "Control-m" it's a new slide. Well, it doesn't make sense to me.

- Irena

An important lived meaning shared through these anecdotes is that feeling condescended or inconspicuous when receiving ICT assistance can be demoralizing regardless of whether it is experienced through an interaction with a peer, lab advisor or any other official help provider on campus.   In the same vein, the participants also recollect receiving good help from both official and unofficial help providers, assistance that had quite a different lived meaning for them. Instead of feeling disregarded, disillusioned and even offended, participants recounted feelings of being noticed in an understanding way and attended to carefully and thoroughly.  As with their enthusiasm in speaking about their learned competencies with ICT, they were also more effusive in sharing anecdotes of receiving good help, recollections that depicted a far more affirmative and reciprocal lived relationship with their help providers.

**Affirmed and Indebted:**
**Exploring the Lived Experiences of Receiving Good Help**

Understanding the difference in lived meaning between international students' lived experiences of receiving poor and good ICT help can be a rich source of developing a finely tuned tactfulness as a help provider.  Aline provided an excellent anecdote that depicts this stark contrast, recalling an experience that many students can likely relate to.

You know what they did to us? We had to attend a four hour class about filling in our tax forms with this girl talking throughout four hours. Do you know how brain damaging that is? And then you come out of the class, you feel nothing, you

even forget the first thing she said; but thankfully there are these students who in the same group I was in and they were like, you know, we are offering help. You can come to [this classroom] and they had two computers, each side-by-side and we fill it in with you, you know, we do it together, and that's what I call good help.

- Aline

While it can be said that in both of these forms of help Aline was engaged, the lived meaning of the experiences differed significantly. In the case of the extended lecture, Aline felt adversely affected, forgetting everything she was told, while in the case of hands-on, collaborative help she was left feeling connected to others, successful and satisfied.   If we follow this line of thinking, being engaged cannot, in itself, be considered an essence of receiving good help.

Interestingly, by definition and etymologically, the word engaged is not neutral in its possible meanings.  Its most common usage, as defined in the Collins English Dictionary (2003), signifies being "employed, occupied or busy" and is often used in reference to being engaged at a specific workplace, engaged in study or engaged in a conversation.  This would be the manner in which the currently popular term "student engagement" is used.   Yet, "to be engaged" can also signify more value-laden relations, including being "pledged to be married" and, ironically, being "entered into conflict" with another person or country.  The word "engaged" is formed from the prefix *en* from Old French, originally from the Latin word *in,* and from the Old French word, *gage*, originating from Germanic.  Like all prefixes in English, the prefix *en*, or *in*, has many significations.  For example, it can mean "inside, within, a place" or "a state, situation or condition", and it can "indicate goal or purpose" or be connected with a phrase "as a consequence of, or by means of".  The word, *gage*, comes from Old French and means "something deposited as security against the fulfillment of an obligation"; however

historically it was used in reference to "a glove or object thrown down to indicate a

challenge or combat" and meant, in its archaic form, "to stake, pledge or wage".  In terms

of the participants' lived experiences receiving ICT assistance, to be engaged in receiving

help could thus be described as ranging from being in a state of directed and interpersonal

involvement in the meaningful enterprise of gaining ICT competencies to being in a state

of obliged attention in order to ensure success as a new international student with little or

no ICT knowledge and skills.

Aline's lived experience with filling out tax forms evokes this push of pull of

being engaged.  In a situation where she had expected to be provided with useful

assistance, she speaks of feeling "nothing" and forgetting everything she was told, an

experience that can be said to imbue the lived meaning of feeling inconspicuous, or

unremarkably engaged.  At the same time, she depicts being physically and temporally

involved in learning new ICT skills in an atmosphere of privacy, attentiveness and

kindliness.  This is a way be being engaged that emerged as an essential theme in the

participants' stories.  For example, Samiya describes a lived experience with receiving

affirming, hands-on ICT assistance from her husband.

> He just helps me like he keeps showing me like how to proceed like where to find the…if you do this kind of thing and go through this out you will be able to figure out the solution.  Actually he's showing me on the screen.  It goes both ways like sometimes he does and I watch how he does and sometimes he sits beside me and then tells me "this is the step, go on this, go on this" and this is the route.
>
> - Samiya

Samiya's interaction with her husband includes a level of calmness and openness that is

quite different from her recollections of receiving poor help.   While it may be that her

comfort with her husband enabled her to be less guarded, what she recalls is her

husband's patient, step-by-step and doing oriented help giving approach.  Abul describes

a similar, personalized explanation that he received from his roommate when he was

studying his undergraduate degree in Turkey.

> He really help me a lot, from the basic very beginning. "Abul this is keyboard and this is the function of these things. You need to open this program in this way. You need to save this way." Like from the very beginning and how can I say that's, very carefully and very easily. […] And my roommate was explaining me in Bangla. In my own language. And it was in every details, you know. "These icons are for this use. That icon is for that use. If you want to save this one, you need to click here, you need to put your file name and something like this." So, step-by-step, you know.
>
> - Abul

For both Abul and very likely for Samiya, being shown how to use ICT in their

own language may have expedited the learning process. However, again, while language,

marriage or cultural similarity may have added to the positive experience, these did not

appear as essential to their lived experience. They do mention these facts of their

relationship with their help provider, but it can also be interpreted by their anecdotes that

if Samiya's husband was impatient with her or if Abul's roommate treated him with scorn

for not knowing what a keyboard was, their relation or common socio-cultural and

linguistic heritage would have fallen to the wayside. In terms of pacing and clarity

though, language is a central theme that did emerge in the participants' stories. For the

participants in the focus group, their positive feelings about working with peers would

often invoke their sense that their peers speak to them at a level and at a speed they can

more easily understand and relate to.

In this respect, language seemed connected with how attentively the participants

felt they were engaged, both physically and emotionally. For example, one of Irena's

most poignant recollections of good help was not from a person close to her, or someone

who spoke her language; rather it was from her first landlord who took a sincere interest

in her and took pains to explain things to her and help her complete one of her first

assignments.

> I was asked in the very first days to make a one page statement in English. I could barely speak English at that time, about what I want to study and which way I want to go. So I was a little scared and I went and talked to her and she said, "Write down however, whatever. Put it on paper on the computer anyway and we'll go through it and I'll show you what, how to arrange on the page and format it or maybe words, spelling." 'Cause I didn't know that you could spell check, I didn't know all this stuff that the computer actually does for yourself. […] I would be here at the computer and she would look over my shoulder and make sure that everything looks good, is spelled good, properly. […] Sometimes, for instance if she, I couldn't find a tab or something, she would show me, "OK here you go there." It was just easier than to use, especially because I had a language barrier at the beginning. It was hard to understand and hard speak for me. […] She's not fast. She, I don't know, she just has a way of explaining very well.
> - Irena

The language barrier that Irena must overcome is eclipsed by the ICT requirement

to express her ideas through a word processed document. Her landlady was attentive to

her anxiousness and she took an unhurried approach to providing guided, hands-on

assistance that enabled Irena to complete her assignment and feel she accomplished

something. Irena also remembers the patience and attentiveness that she received from

her partner when she faced difficulty with ICT, receiving assistance through an extended

online chat, including sending documents back and forth until she finally understood how

to create a certain kind of graph in Excel. She remembered her partner urging her to calm

down and go through the learning process with him step-by-step, a language and

approach that was both soothing and assuring.

For Chidi, good help is exemplified by feeling like his help giver is attentive to

his level of ability and does not give up, no matter how long it takes, until he is

"satisfied" and he feels he comprehends what he is seeking to learn. Oba recounts an

anecdote where she received help from a friend of her cousin's, a person who, while a

stranger to her, "took his time" and showed her how to solve her problem, making her write down the steps as he demonstrated what to do.  Abul describes feeling in a "comfort zone" when an informal, professional help provider put "all her own things aside" and assisted him even though he knew she was very busy.   Leo recounts an anecdote rich with this language of affirmation, patience and understanding.

> She felt very outgoing, kind enough to help me, you know?  […] Kindness meaning that I think she is concerned about somebody who is in trouble like this, you know?  [W]hen she finished one step she said "You understand that? You know how I got to this? You know how I got to this?"[…] "Anytime you need help, let me know.  I'm here", you know. So, in course of trying to do that I said, "You know how long I been here? For four hours!" "Oh my God! Four hours? So anytime you're in trouble let me know", you know. So there I saw her concern.
>
> - Leo

It is clear in this anecdote that the hands-on, physical aspect of being engaged is crucial for Leo, but that what seems to be most memorable was the lived relation of feeling that the person helping him was concerned, that she cared about his situation.  In another similar anecdote, Leo described how a peer gave him "his time, his energy, everything" when providing help, in a way that "confirmed" his feeling of belonging in his department.

> There's somebody I just asked, and the way he's helping me, he's giving me his time, his energy, everything. Really need to discuss and he wasn't in a hurry, you know?  So that really got me going, you know and that also confirmed to me the family thing I'm saying. This man belongs here, and he feels I am his brother, you know?
>
> - Leo

In an anecdote from early into her studies, Aline recounted asking a stranger for assistance to log on to the Internet.  She described how, when he realized she was new to Canada, he walked her to get her password, and when they returned with it, how he showed her what to do, logging in for her and going through each step.  After he logged

her in, she says that he logged out and then asked her to show him she could do it herself.

For Aline, her peer's actions remained with her as a meaningful, sincere experience of

receiving ICT help.   Aline also related a similarly detailed anecdote about how she

learned how to use the library.

> I remember my first time trying to borrow a book. And it was an older woman
> and she was so helpful.  She taught me how to look for books.  She taught me
> how to open up, like, which, specifically if it's an article on line.  And she taught
> me how to do all these things.  Like, before when I entered the library, I walked
> up to like….I never knew it was a huge library all the way upstairs.  And I was
> literally on the wrong floor looking for a specific book and I'd like…looking at
> the title, and like this.  I can't find this.  And so I went to the accumulation desk,
> whatever they call them, and they were there, and she like, she just walked
> through like everything.  Like, you know, opened up everything, and she was like,
> "If you do this, this happens.  If you are looking for art, if you want specific title,
> you know, you type in political science, philosophy, drop it down, type articles".
> She, like, did everything. And she even like collected which books I wanted. […]
> So that was helpful technology-wise.  […] She wasn't teaching.  She didn't make
> me feel embarrassed for asking.
>
> - Aline

One of the underlying essences of this lived experience shared by Aline is the

sense of discretion she felt the librarian exhibited.  Such discretion is not only a matter of

choice of language; it is also felt through being in a proximate and private environment.

For Samiya, it was learning new ICT skills through hands-on problem solving with her

husband side-by-side.  For Abul it was the same with his roommate and for Irena it was

the same with her landlady at her office.  None of the participants shared stories where

they were receiving ICT help in front of a large group of people.  Many of their anecdotes

related lived experiences receiving good help by someone in their home, in next office, at

the next computer or table, or within their department. Aline described how this private

helping space felt for her in a lab that had separated cubicles.

> I'm the only one there and, um, if I'm making a mistake or don't know how to do
> something I could, or when I get help, when somebody's helping me, it feels like

> just me and the person alone looking at the computer. You know, and like when you do, somebody does that and what is he say, what you're talking about.  But when you have your own space, your own cube, it's like, there's only the two of you, and you and the computer.  And so, it's like a partnership in between.
>
> - Aline

To feel as if one is in a "partnership" with a help provider or that one is "confirmed" in one's feeling of being like a "brother" are strongly affirmative forms of engagement that can have a tremendous impact.  According to the definition of "affirmative", to say that the participants were "affirmatively" engaged would mean that they were so in an asserting, validating, assenting or agreeable manner (Collins English Dictionary, 2003).   "Affirm" comes from etymological Latin root *firmare,* meaning "firm or stable" and the prefix *ad-* meaning "to or towards".  In this sense, one could also consider affirmative engagement as being a stabilizing and resolving lived experience. The depth of such feelings associated with affirmative engagement can be quite remarkable; if a person comes to help another in a time of distress and does so in an affirming manner, the memory can remain like a treasured stone or photograph or like a song one learns to sing.  In such a light, it may not be surprising to discover that for the participants, feeling affirmatively engaged was intertwined with a sense of reciprocity with or indebtedness to their help providers or with other international students experiencing similar situation as they have.

Abul presents this mutuality in describing his genuine and generous expressions of indebtedness to certain help providers.

> [S]ometimes Alex their kids come, Colin or Alex, and I used to give chocolate to their kids and that something good rapport, you know.  Is like already built.  And perhaps that may actually help me.  Whenever I asked for help, they're always helpful and they never asked me to go for next time or something like this.  […] Like, Ivan when I went last summer home. Not this summer, the summer before. I brought gift for Ivan and Ivan's wife.  And it was unexpected for them.  They

said, "Oh Abul, how come?" You know. Like nice, not very expensive, you know. But, something like a token of love or something. So, this, when I did something unexpected to them. […] Whatever I do, you know, it will come back. Maybe not in this form, but maybe in another form. It's something like reciprocal.

- Abul

Abul's gifting to the children and wife of his help providers represents an explicit gesture of indebtedness. Aline and Oba mention feeling that after an extended period of requesting and receiving help from someone, they feel the need to give back to this person in some way. While they feel they cannot provide the same level of ICT help they received, expressing gratitude remains important. As Abul says, it can come in other manifestations: "[m]aybe not in this form, but maybe in another form".

The meaning of "indebted" in the context that Abul describes would be closest to "owing gratitude for help, favours, etc." (Collins English Dictionary, 2003). The word "debt" originally comes from the Latin word, *debitam*, meaning "thing owed" and in its verb form, literally meant to "keep something away from someone". To be *in*-debted can thus be said to be in a state of feeling that one has something that must to be given to someone else. In relation to the lived experiences described by the participants, this is an important distinction to make, since there can exist a spectrum of indebtedness that can range from feeling grateful to feeling obliged to act upon this gratefulness and provide something in return for the good ICT help they received.

On this spectrum, Vlad shares an anecdote that presents a more implicit feeling of obligation or indebtedness in relation to receiving good help, especially that which comes unexpectedly.

One student who helped me with iMovie, stopped by and said, "Have you submitted your marks for the class?" And I said, "Not yet. Well I have a problem. Well, I can't submit them." So he said, "OK, if you experience the

same problems let me know and I'll try to figure it out and I'll tell you." So a couple of hours later he said, he came back and said, yeah, "You have to save the marks first and then submit them." Because he couldn't submit them and then I passed that on to another colleague who I knew would be submitting the marks himself pretty soon so, you know. That was the sharing and sometimes it's not asking for help. It comes to you.

- Vlad

Vlad's story invokes a sense of recursive indebtedness: after he was assisted by his helpful colleague, he felt indebted to pass on this new knowledge to another colleague. In an anecdote similar to Vlad's, Irena describes what it was like for her to have close proximity with her peers in her lab, where help could be reciprocated easily.

Our lab was separate than most of the other graduate students, so…we knew each other better and we spent a lot of time together, doing assignments for different classes. But we would have the chance, each of us, to ask just like that. You're typing and suddenly there's a question, you know, "So what should I do here? What should I say? Is this correct? Is this not?" So…that was a group, like a community, right? A little community that was supportive to each other..

- Irena

The reciprocity that Irena and Vlad describe is one that involves an open exchange of ideas, tools or assistance with ICT. Samiya presents this lived relation in her desire to feel equally respected for the knowledge and skills she can share in exchange for approaching a peer for help.

With my colleague, I gave him few tips which I learnt in India like for doing…Physics numerical problems and chemistry numerical problems…And he was really impressed with that and like I knew that the word of appreciation and little bit through his eyes or whatever gesture, right. And I think now I feel very comfortable because I don't know many things here like you can. So I easily go and ask him about "What is that?" And then he explains it to me and he never like you know…How should I say like, he makes me comfortable.

- Samiya

Underlying these anecdotes is the sense that feeling indebted can lead to a helping "community" of learners, as Irena called it. Indebtedness in this context surfaced in feelings of personal fulfillment through empathic listening and hands-on assistance with

fellow international students facing difficulties with ICT such as those they faced

themselves.  Irena relates her enjoyment in being a mentor to two new international

students and the simple pleasure in knowing that by helping these students, they also

might be encouraged to help others in the future.  Leo describes in detail just how deeply

help giving can delve into his own lived experience requiring, requesting and receiving

ICT assistance.

> You feel a commitment. You don't experience, you don't know how somebody is pressed.  Somebody is in trouble, so you commit yourself to it and then you feel a kind of satisfaction, you know…[…] You are being able to help somebody around a problem you were experiencing before…[…] Being as patient as possible, as slow as possible, and to always ask, "Do you understand? Do you understand?  If you don't understand, come back." And then sometimes you see a task very simple, you know, because you know it now, and the person doesn't understand and you wonder why…But then it's always at the back of my mind, be as slow as possible. You were there before.  […] [T]his is part of thing I've told myself I have to do, I have to tell myself, "Look, I shouldn't get frustrated with them. It's not their fault…"  Be as much of, as much help as possible. Somebody did it for you…[S]ometimes I do it over the phone.  […] I commit myself to helping. That means if I would go to bed at 11, that evening I'd go to bed at 12…or even 1.  Because if I remember myself having some sleepless nights, out of that, not being able to meet deadlines because of a thing like this, then I want to help others meet deadlines. So instead of my comfort, you know, going to bed at 11, then I go to bed at 12 or 1 that day. Give them an hour or two to someone…
>
> - Leo

As expressed in these anecdotes, indebtedness manifests in lived relations

that often extend beyond the moment of help reception.  Indebtedness can range

from feeling obliged to return a favour, to seeking a means to negotiate future help

to feeling part of a family or immersed in a collaborative, comfortable community of

learners.   In this regard, the lived meaning of receiving good help can be said to

have a strongly affirmative essence, but at the same time dyed with an ambiguous

tint of personal accountability.  This brings us back to the cross-cultural nuances that

were examined at beginning of this exploration in context to requesting ICT

assistance. To be precise, the feeling of receiving good ICT help can be affirming and comforting, but can also contribute to feelings of insecurity and unfamiliarity; in this case about how to adequately or appropriately reciprocate good help.

I have experienced this with international students I have helped, in particular where I have afterwards received gifts or thanks that seem extravagant or where students want to negotiate with me in advance of potential consequences. Recently, I was approached with a gift before helping a student facing a grave situation and I tried explaining to her that it was my job to help her. Explaining this was a delicate task, as I did not want to exacerbate her feelings of insecurity. I also feel that I have let down a number of my international peers over the years by not following up on their anticipated sense of friendship that emerged from being helpful to them. On the reverse side, I remember being in Germany and receiving help from two of my peers over a warm "apple wine" in between classes and not knowing the etiquette involved; whether what I was doing acceptable or not, if I should be buying another round, etc. Speaking in English with my German schoolmates about a French assignment over an alcoholic beverage at a kiosk right outside of our gymnasium (high school) was a lot to make sense of at 18 years old.

In this line of thinking, the lived meaning of receiving help must be viewed in direct relation to requesting ICT help. The participants shared anecdotes and reflections that depict an underlying search to overcome insecurity and gain familiarity with their new learning environment, including the very behavioural and cultural norms of help seeking in and of itself. They describe a search for comfort and affirmative engagement, an aversion to condescension and inconspicuousness

and a deep, unique implication of indebtedness for good help received.  However, if this were to be the final analysis resulting from this study, it might be hard to distinguish the lived experience of international students requesting and receiving ICT assistance from other types of assistance they may have sought and been provided.  To assert such a distinction, it is necessary to return to the analyses throughout this chapter with the intent to focus more closely upon the lived existentials that pervade the lived meaning of requesting and receiving ICT assistance in particular, if any indeed can be deciphered.

**Amplified and Extended:**
**Examining the Essences of Requesting and Receiving ICT Help**

Like the many thousands of newcomers to Canada each year, the participants in this study had to learn about, and adapt to, many things during their first months of living and studying in their new environment.  It goes without saying that they experienced requesting and receiving assistance on numerous occasions, for numerous things. However to slot all help seeking experiences into one category would not necessarily reflect the lived meaning that different types of help seeking might have.  For example, there may be a marked difference between requesting help for such things as securing long-term accommodation or signing up for recreational athletics and seeking assistance with ICT to complete assignments.  It may be that the participants would have felt similar feelings of unfamiliarity and insecurity in requesting assistance; however the degrees might vary or be experienced variably.

Analyzed in this manner, the horizon of lived meaning of requesting and receiving ICT assistance comprises a simultaneous blending and contrasting of the

foreground image of the participant seeking help with ICT and background image of the participant adapting to his or her new learning environment.  Like the complex and cohesive foreground-background subject and imagery in the paintings *The Scream* and *Towards Prince Edward Island*, the participants' lived experiences are evocative of not only a specific moment seeking help with ICT, but of their overall context in which they are seeking help.  This interrelationship emanates from the context in which the participants sought help or the way in which help was provided: depending on the situation, they felt an amplified or extended sense of insecurity, unfamiliarity, comfort or condescension, and/or an extended sense of indebtedness, inconspicuousness, self-assuredness or affirmation.

The word amplify means "to increase in size, extent, effect as by the addition of extra material; augment; enlarge; expand" and comes from the Latin words *amplus* and *facere* meaning "spacious" and "to make" (Collins English Dictionary, 2003).  While feeling insecure might be a general lived relation to have as a new international student, for international students with limited ICT background, the added pressures of being expected to have a certain level of ICT skill and knowledge may augment the level of insecurity felt.  If their insecurity is heightened, so might be their vulnerability in the face of abrupt or discourteous help provision, and so they may also be more affected by condescending language or behaviour.  Feeling unfamiliar with their new learning environment is also amplified by the requirement to learn not only help seeking norms, but the ICT language, tools and logic to understand the help provided.  Asking for help under these conditions, the participants feel an amplified sense comfort when good help is provided. As new international students with few if any contacts their search expands

beyond seeking ICT help into the background lived experience of making new friends, finding mentors and developing a sense of community.

Among its many meanings, the word "extend" means "to draw out or be drawn out", "to broaden the meaning or scope of" or "to prolong completion (of a task)" and comes from the Latin root *tendere* meaning "to stretch" (ibid). For the participants, the experience of extended inconspicuousness is felt in the layering of assumptions about what they do or don't know about ICT, and in feeling that their particular needs are not addressed on more than one occasion. On the other hand, feeling an extended sense of affirmation is, for example, to qualify good help they received as involving prolonged, in-depth, hands-on assistance that went beyond normal expectations. To say that the participants experienced extended feelings of self-assuredness is to acknowledge that they had to draw out their personal experience and resources to get the help they sought, even if their approach clashed or misaligned with their new learning environment. This broadened scope and depth of help seeking with ICT includes an extended sense of indebtedness, reciprocity that might last for years and stretch out to include helping other international students new their institution over the course of their studies.

Taken altogether, at the foreground of this lived horizon of requesting and receiving ICT assistance is the act of help seeking in and of itself. To seek to understand the specific essences of this act is to bring together both requesting and reception into one lived experience, without characterizing the experience positively or negatively. In this combined neutral perspective, the participants' help seeking with ICT can be described as a self-conscious search for discrete, non-judgemental, patient demonstration and guided practice reliant upon nurturing or forming reciprocal helping relations with others.

With this analysis and summation of the separate and combined essential themes and lived meaning of requesting and receiving ICT assistance, the presumed and paradoxical aspects of ICT help provision for international students in the post-secondary sector are also amplified and extended to a greater degree.  Of note, the participants did not typically access the professional help provided by traditional sources of ICT help provision, nor did they feel there was a clear separation between their studies and the software programs required to complete their assignments.  Where they described their good experiences receiving ICT assistance, their anecdotes sometimes verged on what might be considered "cheating".  For example, Abul mentions in one reflection, "[B]asically if I count that how much I did for that poster making and how much she did, it will be like 75% and 25%.  Like she did the 75% and I did 25%".  Aline, Samiya, Leo and Irena also described good help in some cases as instances where help providers did their work for them, by completing a chart, graph or working on a specific program.  If we are to take the participants' stories at their face value, we must also try to see their perspective that the presumed separation of ICT from the academic expectations of their courses creates a false schism that underscores a more abstract concept of help provision.  The participants did not come to their prospective help providers with a theoretical question; they came with a concrete problem they needed to solve in relation to a specific assignment.

The anecdotes and reflections shared by the participants help to understand the paradoxical context wherein an international student who desperately requires ICT help does not request it from their peers or from the professional help available.  It is the paradoxical context wherein an international student may appear to be requesting help

with ICT, when in fact, the student is seeking a long term relationship that could lead to an affirming, reciprocal support network.   It is the paradoxical context wherein a new international student with little or no ICT background who needs help is so insecure he doesn't ask and wherein, by the time they feel more self-assured, they don't need such in-depth help anymore.

This presumptuous and paradoxical context underlies the pedagogical question of this thesis.   To ensure that we do not become fixed in any particular mold of ICT help provision, we must ask how we can tactfully and effectively enable international students with limited ICT background to have the kind of assistance they need and will access.   In order to do this, we need to continually question if the assistance provided is sensitive to the uniqueness of international students' emotional, psychological and technical needs. We must consider this question in relation to whether or not assistance is sensitive and responsive not only to the technical elements of ICT help provision, but to other possible essences, such as the search for familiarity, comfort, self-assuredness, affirmation and reciprocity.  We must look not only at how our help is received, but how it is felt when it is required and requested. To consider all of these aspects is to look beyond our own assumptions about what we do and what should be done to provide professional ICT assistance, if indeed that is even the issue at hand.  To this end, the next chapter will provide a discussion on what can be gleaned, pedagogically, from the results and analyses of how the international students in this study described their lived experience requiring, requesting and receiving assistance and from the research and knowledge in related fields of study.

**Chapter 6:**
**Discussion**

*I felt a limitation. Who is going to help me overcome that limitation? People who are ready to share their knowledge.  That is why I feel this thing will not end today. It will not end tomorrow. People will continue to be in need. How do I help them also to overcome this? And one day, they will share again with this person.  This knowledge is endless.*

*- Leo*

**Getting in the Picture:**
**Visualizing the Lived Meaning and Practice of Good ICT help**

ICT assistance provided by contemporary post-secondary Canadian institutions must be assessed to ensure that it responds to the needs of a diverse student body.  This includes international students with limited or no ICT background.  Such assistance must be considered in terms of how responsive it is both to the technical elements of ICT help provision and to the potential emotional, psychological and interpersonal lived meaning of ICT help seeking.  As expressed in the past two chapters, for the participants in this study, the lived meaning of ICT help seeking included such things as the search for familiarity, comfort, self-assuredness, affirmation and reciprocity.  To consider all of these aspects is to look beyond our own assumptions about what we do and what should be done to provide professional ICT assistance to a diverse student body.  This chapter provides a synthesis of the essential themes that emerged from this research with an emphasis upon considering how they relate to the day-to-day practice and programming for post-secondary professionals directly or indirectly involved in providing ICT support to international students.  To do this, focus must shift to the act of help provision itself, and correspondingly, to the actions of the ICT help provider within specific help provision contexts.  The aim is to draw out the details that have significance, to develop

an image that reflects not only the lived experience of the participants themselves, but of the people they interact with and the environment they live in.  From the pedagogical framework of this thesis, the intention is to relate an interpreted description of what the participants termed "good help" with ICT.

As a phenomenological study, the intent of this research is to deepen what van Manen (1997) would call the *tactfulness* of the ICT support experiences that students have with instructors and support staff.  Tact is gained by instructors and support staff from careful observation, active listening and thoughtful reflection upon the lived experiences of one's students.  Using van Manen's (1997) approach to phenomenological research in education, implications from this study thus emerge in the form of *advice*. This advice includes considerations that instructional and support staff could make when interacting with international students who require ICT support, whether this is face-to-face, through small or large group facilitation, teaching or training, or indirectly through preparing educational and/or student support related materials.  The uniqueness of each participant's voice and lived experience, including their personal and cultural backgrounds with seeking ICT assistance is the lens from which such advice must be grounded.  Like all advice, it should be considered within one's own exploration of international students' lived experiences in post-secondary education settings.

**From Confusing Click to Chosen Community:**
**Essential Themes to Guide Tactful ICT Help Provision**

At the foreground of the participants' lived experiences with ICT help seeking is the lived meaning of requiring assistance with ICT.  In the background of this lived experience is the lived meaning of ICT as a central means of self-expression and

demonstration of their acquired knowledge in their new post-secondary setting. In this picture, the computer, mouse and keyboard, in particular, emerged as a *human-technology-world* relation in both the embodied and hermeneutic terms as described by Ihde (1990).   At the perceptual level, embodiment relations were prominent in the participants' lived descriptions of requiring ICT assistance in relation to their utilization of the QWERTY keyboard.  Not knowing the layout of the keyboard, some the participants felt limited in their typing speed, the potential ease of their human-computer interaction reduced.  The result is longer completion period for assignments and the associated frustration that comes with being impeded by lack of skill using such an essential ICT tool (Chickering & Reisser, 1993).

Less visible, yet most essential to this foreground image of requiring ICT assistance are the hermeneutic human-technology relations with the interface of computers, printers and photocopiers.  As Hobart and Schiffman (1998) theorized, the computer was experienced as having a hidden dialectic and logic that held a key to their academic success.  The participants did not experience the playfulness and tinkering with technology that Turkle (1995) described unless involved in pursuits using software programs for personal reasons or without impending deadlines.  Rather, they described the experience of using ICT early in their studies as if it were forced upon them, as a personal challenge, formidable barrier, and as a source of emotional, psychological and even physical stress.  In Ihde's (1990) terms, using ICT was "effortful" rather than "transparent" (p.94).

At another level, the participants also described this lived experience as involving adjustment to what Ihde (1990) terms the technological cultural hermeneutics and

lifeworld shape of their post-secondary setting, marked by ubiquitous use of ICT.  Before

arriving in Canada to study, few had experienced applied integration of ICT in their

academic studies.  Some perceived word processing as a lower form of paid

administrative work or experienced Internet searching as a form of punishment.  The

participants experienced this as a marked contrast to the cultural capital (Bourdieu,

1984/2001) associated with ICT in North American post secondary settings. Through

their "fascination" with what they called "small stuff" in their home countries, the

participants principally learned how to use computers on their own. Such lived

experiences resulted in ineffective technology transfer and/or feelings of being mystified,

frustrated or excited by what Ihde (1990) called the *lifeworld shape* of their learning

environment.  The participants described the challenges and increased sense of comfort

they felt in becoming a part of a globalized, ICT enriched, academic culture of post-

secondary institutions and the larger socio-cultural, activity-centered nature of ICT

literacy that help define them (Kaptelinin & Nardi, 2006).

It is this lived experience of requiring ICT assistance that is at the foreground of

the participants' lived meaning of seeking ICT help.  For, without requiring assistance,

they would not have requested or received it.  In this same lived experience, however, are

the participants' feelings associated with needing and accessing help.  The demanding

requirement to use ICT was experienced as a barrier to their ideal academic performance

and sense of adequacy in comparison to their peers, decreasing their self-esteem

(Chickering & Reisser, 1993).   The participants' requirement for assistance was mired

in their self-awareness that they didn't have just one question but many, leading from one

click to another.  Compounded with feelings of unfamiliarity regarding who and how to

ask for ICT assistance, including using the English language to seek help, the lived

meaning of requiring ICT assistance increases in complexity.  Feeling timid, helpless,

lost or defeated, their lived space and lived relations with others also begin to take on

foreground significance.

At this interpersonal level, the participants' lived experiences requesting and

receiving ICT assistance reflected in many ways Bakhtin's interconnected concepts of

*heteroglossia* (1981), *adressivity* (1986) and the *non-alibi of being* (1993).   Adapting to

an English language learning environment and to new ICT terminology, the participants

struggled with framing proper questions and in understanding their help provider's

responses, if spoken quickly and with limited demonstration.  They spoke about feeling at

ease when they could interact with their help provider in their own language, or when

their help providers, most commonly international peers, would talk with them "at their

level", a lived experience described in other studies as well (Volet & Karabenick, 2006;

Trice, 2004; Halic, et al., 2009).  Communication across cultures, through one's first,

second, third or fourth languages, with different intentions or expectations and different

backgrounds with ICT marks the *heteroglossia* of the participants' dialogue with their

help providers.  Seeking ICT assistance in such a context, the participants described

trying to attain what Bakhtin (1981) termed an "active understanding" (p.282).

> Thus, an active understanding, one that assimilates the word under construction
> into a new conceptual system, that of one striving to understand, establishes a
> series of complex interrelationships, consonances and dissonances with the word
> and enriches it with new elements.  It is precisely such an understanding that the
> speaker counts on.  Therefore his orientation to the listener is an orientation
> toward a specific conceptual horizon, toward the specific world of the listener; it
> introduces totally new elements into his discourse; it is in this way, after all, that
> various different points of view, conceptual horizons, systems for providing
> expressive accents, various social "languages" come to interact with one another.
>
> (p. 282)

Such active understanding was experienced when the participants' help providers created a strong link between their spoken words and their gestures, between explanatory and demonstrative assistance.  This perceptual essence of the participants' search for active understanding is reflected in Merleau-Ponty's (1945/2004) concept of embodied *attention.*  Being told what to click or what function to use without seeing the action done more than once or doing it oneself decreased their capacity to attend to what they were trying to learn;  their gaze upon the screen or focus upon a particular icon or key disconnected from the directions being provided.  In contrast to this, the participants' stories of good help focused on lived experiences where activity was at the centre, where they could learn a new program or how to use a photocopier in an authentic context within a community of practice, including peers, instructors, friends, and professional help providers (Kaptelinin & Nardi, 2006; Lave & Wenger, 1991).

Participants felt affirmed when a peer, friend or professional help provider sat down and went through, step-by-step, the ICT requirements of an entire assignment or task.  Such a level of support exposes the complex emotional and psychological lived meaning of being a newcomer in a new learning community (McCarthy & Wright, 2004). The power relations inherent in certain professional help contexts, faculty-student interactions, or in certain dynamics between international and domestic students (Chickering & Reisser, 1993) resulted in misunderstandings or confusion around what help was and wasn't allowed to be provided in relation to academic integrity.  This hidden or implicit expectation with ICT limited their sense of ease as newcomers, their inbound trajectory tempered by their lived experience with perceived individualistic,

parochial, elitist or discriminatory attitudes, even towards such lived experiences as help seeking (Lee & Rice, 2007).

The depth of this assistance reaches into the lived meaning of attentive, affirmative ICT support, requiring what Bakhtin (1986) termed the quality of *addressivity*. This is experienced in the degree to which a person perceives the unique history, knowledge and understanding of their addressee and adjusts his or her utterances accordingly. This quality of *addressivity* is evident in how the participants described feeling comforted and satisfied when spoken with in a manner that accounted not only for their background with ICT, but also their English language abilities and their sense of unfamiliarity and insecurity as international students. At the same time, as observed and reported in other studies (Pope, et al., 2005), the participants' anecdotes and reflections were marked by their determination to adapt, in some measure, to the help seeking language and norms of their new learning environment. This "social click" can thus be said to be entwined with the *heteroglossia* of their learning environment and the search for mutual *addressivity* between themselves, as help seekers, and their potential help providers.

It is not surprising then that while none of the participants were involved in a formalized learning community, serendipitously or strategically they found a trusted, proximal network of peers, community members, and official and unofficial professional help providers. They sought comfort in campus environments that lent themselves to increased social interaction and safe, private spaces (Kuh, et al., 2005; Hamrick, et al., 2002), where an instructor, peer or lab assistant could sit down beside a participant, turn her screen and talk through a problem unnoticed by others. In this context, it may also

not be surprising to note that the participants described good help as requiring a level of time and attention that made them feel somehow indebted.  They felt the need to provide their help providers or their families with gifts, or sensed achievement and fulfillment from helping other international students who faced challenges with ICT.  This sense of reciprocity lends itself to the development of self-esteem and the formation of a grounded identity as successful students (Chickering & Reisser, 1993; Hamrick, et al., 2002). At the same time, when the participants were constantly indebted to others for help, they described feelings of vulnerability and/or inconspicuousness, or of being condescended to.  In their search to develop an informal support network, they faced interpersonal and cross-cultural challenges, feeling less capable and marginalized by their domestic peers, feelings that have been shared in other studies (Halic, et al. 2009; Paulus, et al., 2005), even in formalized, cross-cultural learning communities (Hlyva, 2004).

Searching for affirmation, the participants in this study not only sought people who could help them solve their ICT problem, they sought help providers they felt would compassionately and/or experientially understand the situation they were in and would respond to their request with openness, generosity and attentiveness. They sought out others to whom they could also reciprocate their appreciation, or they actively pursued opportunities to give back and share their knowledge and skills with other international students they knew were in need of assistance.  In Bakhtin's (1993) terms, the participatory essence of the action and *being-as-event* of ICT assistance was lived by the participants with full *answerability* to the *non-alibi of being*.  The lived meaning of good help provision, and their ethical responsibility in helping others, was marked by an emotional-volitional tone that is an "ought-to-be attitude of consciousness, an attitude

that is morally valid and answerably active" (p. 36).  At this foreground image of

requiring, requesting and receiving ICT assistance, the participants experienced unique,

"once-occurrent" (Bakhtin, 1993, p.36) interactions with their help providers.  Each

involved an emotional-volitional engagement with ICT help seeking that required

transcending cultural, linguistic and/or technological barriers that could have kept them

feeling unfamiliar, insecure and distressed and from achieving agency and communion.

**When the Details Matter:**
**Creating Conditions for Positive ICT Help Seeking Experiences**

It is agreeable to visualize an international student in need of ICT assistance

working side by side with one of his or her help provider(s), learning new ICT knowledge

and skills and developing a lasting, reciprocal relationship.  However, such a positive

help seeking context must not eclipse the potential effort and determination required in

order for such a situation to take place.  The question that begs to be answered is what

can be done to ensure that these types of situations occur as often as possible.  While

naturally occurring, positive ICT help seeking contexts will arise without planning there

is also much that can be done by post-secondary institutions to make the conditions for

such situations manifest more consistently than might otherwise be the case.  This role

extends to student support staff, instructors and administrators and begins even before

international students arrive at their post-secondary institution.  In creating a picture of

tactful and effective ICT assistance for international students with limited or no ICT

background, even the smallest details begin to matter.

One of these details is the pre-arrival and arrival support and messaging.  Before

international students arrive in Canada to study, effort should be taken to make sure that

they are aware of the ICT requirements to be academically successful, both at a general

level and, where special ICT requirements apply, at a program level.  Admitted

international students who have little or no ICT background may not, however, make the

effort to increase their ICT literacy, or may not have the resources to do so.  Thus, at

arrival, international students should be offered a special orientation to the institution's

online tools and functions, from email to course registration.  As a means to create

opportunities for interaction between new and senior students, such sessions should

involve peer helpers who have strong ICT, interpersonal and cross-cultural

communication skills, and who would be available to assist after the training.

International student services, IT support services and learning support services could

work together to ensure that peer tutors are available for international students, on the

premise that the tutor can meet the international student not only in one specific location,

but at different labs or at student learning areas on campus.  It might also be useful for IT

support and training services to provide early intensive workshops related to the specific

needs of international students with limited or no ICT background.

In providing one-to-one ICT support, it is important for ICT help providers to take

the time to determine the level of support needed for international students.  For example,

while an international student might ask what appears to be an isolated question, such as

how to create a new slide in a presentation software program, he or she may actually need

much more assistance than what he or she presents.  Attentiveness would be marked by

observations and questions that help reveal in a sensitive manner an international

student's capacity with ICT and his or her frame of mind.  The help provider could

include the offer to watch or wait (i.e. if over the phone or online chat) while the student

completes the task on his or her own after being shown and/or told how to do it.  In such face-to-face help provision contexts, the help provider should also consider the potential cultural dimensions of help seeking.  The help provider should be observant, responsive to and inquisitive about the reactions, verbally and non-verbally, of the international student requesting/receiving ICT assistance.  Following up, the help provider should ensure, to the best of his or her ability, comprehension of what was learned.   If it appears that the international student needs a great deal of assistance, the help provider should connect the student with relevant training courses or learning support programs for the student.  If the student is in crisis, the help provider should suggest to the student to contact the International Student Office or relevant office and seek help from an advisor.

Increasing ease of access to ICT assistance is another important area for ICT help providers to consider.  For example, it may be a good idea to have an icon on the computer lab desktops that can be clicked to request a lab advisor to come to a particular computer.  Labs should have plain language messaging via posters, stickers and/or home screens that encourage help seeking and provide clear paths to access assistance.   In larger computer labs or study areas in libraries, roaming techniques could be used to reach out to potential students in need, including international students, where the lab advisor goes from desk to desk and introduces himself or herself and offers assistance.  As mentioned previously, it may also be effective if peer helpers are able to meet students at student commons areas on campus, or at other student computer labs on campus.  Evening and late night assistance may also be something that is considered, possibly over the phone or through online chat.  In terms of online ICT support tools and resources, it

may be helpful to include links to help sites that have helping resources in multiple

languages.

    This last suggestion brings into the picture the dichotomy of including educational

technology as an aspect of improving ICT support for international students.

International students with limited to no ICT background may not feel comfortable using

computer mediated communication or other online tools and resources to seek ICT

assistance.  Alternatively, as shared in the anecdotes by the participants in this thesis,

some international students may have experience and feel at ease with using Skype for

online communication and Google for basic Internet surfing, but feel lost with using

specific software programs used for their assignments.  Indeed, aside from increased

online migration of administrative tasks associated with student life, it is course

assignments that make ICT literacy a requirement for international students to succeed in

their studies.   In this respect, course-based interventions may prove to be as effective, if

not more successful overall, in helping international students with limited or no ICT

background gain self-assuredness and confidence with ICT and ICT help seeking.  At the

very basic level of detail, inclusion of ICT requirements for assignments in course

outlines, along with contact information for ICT training and support could go a long way

to help increase familiarity with expectations and potential ICT challenges.

    However, course outlines should not only expressly state ICT requirements, but

should also include an explanation of how the instructor views class participation and

requests for assistance.  For example, the instructor could indicate his or her openness to

receiving requests for assistance using the avenues listed in his or her course outline

along with his or her aim to connect the students with the appropriate help.  Where an

international student comes forward with concerns about a specific assignment that requires skills with ICT, instructors should investigate how much ICT is part of the international student's distress and provide guidance accordingly. In such instances, what needs to be kept in mind is the potential depth of need and feelings of embarrassment or self-consciousness that the international student may be feeling in stating their need for help in the first place.

However, without prodding, it may be that an international student will not comprehend the full import of such advance preparation. Other, more pedagogically-oriented interventions may be more effective. At an individualized level, instructors in first year courses may consider options for alternative formats to assignments and/or provide time and clear pathways for newly arrived international students to learn the programs required. A straightforward example of this would be to allow students to write out their first assignment by hand and, concurrently, to use the opportunity to direct students to on-campus resources where they can learn and/or improve their word processing skills. Where a first or second year course assignment relies heavily on using a particular program at a high level, a more direct pedagogical intervention may be required. For example, an instructor might connect with ICT support professionals on campus and arrange for a trainer to come into the classroom for a hands-on, assignment related workshop on the desired program. Such a practical intervention can open the field for an international student requiring ICT assistance to participate in a workshop as part of their course, rather than as a remedial, self-motivated endeavor. An instructor can also then stipulate what level of skill is expected with a particular program and thereby clarify associated assessment criteria; a detail that can go a long way to dispelling an

international student's uncertainly around assessment of knowledge representation through ICT.

At a group level, an instructor might hand out a self-assessment at the beginning of a course to gain an understanding of the students' knowledge and skills with ICT (among other possible items) and to identify those in the class who are willing to provide hands-on support to those in need, thereby creating a course-based peer support network. Such a self-assessment could also be used to help form groups for collaborative, teamwork assignments, ensuring a fair distribution of skills and knowledge.   Group projects can increase opportunities for international students to meet and develop meaningful relationships with their peers, thereby potentially expanding their support network.   In terms of academic integrity, group work may also enable more open sharing of knowledge and skills, especially where such an exchange is integrated into the assignment itself and where clear roles, responsibilities and assessment criteria are established.

Initiatives at the level of course based group work bring to the forefront the social dimension of requiring, requesting and receiving ICT assistance for international students. Group oriented work that involves ICT enables shared activity using the required ICT tools for academic success. At the same time, group oriented pedagogical approaches involving international students, including the various manifestations of learning communities, brings to the forefront the need for effective cross-cultural competencies, including cross-cultural communication skills.   The development of such knowledge and skills cannot be assumed to occur naturally through the placement of international and domestic students together in group work settings.  From experience, it

has been learned that such sensitization and acquisition of cross-cultural competencies require active engagement on behalf of instructors and student support staff, and ultimately, to be successful, on behalf of senior administration (Milem, et al., 2005). Initiatives could involve in-course facilitated discussions on valuing diverse perspectives to university-wide utilization of such tools as the Intercultural Development Indicators (IDI, 2010) to sensitize students, staff and faculty to their own competencies in working and studying in a diverse campus setting.

Such initiatives should not lose the emphasis upon help seeking and help provision in a diverse campus and the critical role of ICT skills in being a successful post secondary student. It is quite possible for ICT to fade into the background or be considered a tertiary element of a cross-cultural context, when, in a holistic view, technology permeates our cultural sphere of activity (Kaptelinin & Nardi, 2006; Ihde, 1990). Cross-cultural competencies associated with helping can also be placed in a subordinate position to general concepts such as "respecting diversity", reducing its transformative potential (Milem, et. al., 2005). In the context of a university setting, advocating and practicing positive helping norms, attitudes and practices can be central in creating the feeling of an institution and as such, take on a more immediate, contextual and personally accountable significance (Kuh, et al., 2005; Chickering & Reisser, 1993).

## Limited, yet Limitless: Strengths-Based, Student-Focused, Activity-Centered ICT Support

As a phenomenological study involving 10 participants, the breadth of application of this research is limited. Making broad generalizations about international students and ICT help seeking would be antithetical to the phenomenological approach. More

concretely, it would be disconnected from the current realities of globalization and emergent generations of technologically savvy, mobile international students.  For some international students, in particular from countries such as China, the inclusion of ICT in assignments might be a benefit rather than a disadvantage (Hurley, Hogarty & Bolger, 2006).  Indeed, as participants in this study came from different age groups and from various countries in Eastern Europe, Western Africa and Southeast Asia, certain challenges in analysis and interpretation presented themselves.  In particular, cross-cultural differences in help seeking approaches were expressed by the participants directly, as has been reported in other studies (Volet & Karabenick, 2006; Frey & Roysircar, 2006). Even the unifying aspect that the participants all stated they arrived in Canada to study with limited to no background with ICT proved difficult in some ways. The participants' pre-Canadian lived experience with ICT varied from purely observational to including introductory ICT courses at high school or at a private college. Lacking fixed criteria for participant selection in terms of what may be called ICT literacy made for a range of participant lived experiences with requiring, requesting and receiving ICT assistance and likely contributed to the spectrum of lived meaning that emerged in the data analysis.

In other respects, the diversity of the participant sample for this study produced richness in the data that demanded thorough, iterative data analysis, often resulting in an unanticipated interpretation of seemingly straightforward, surface descriptions.  As an experienced, English for Academic Purposes instructor, international educator, university administrator and past exchange student, critical reflection upon my own interpretative lens was crucial to avoiding early, biased conclusions, from the interview process through

to data analysis and synthesis.  An example was the theme of indebtedness, which at first presented itself in the participants' language as "giving back".  With further bracketing and reflection, this theme came to imbue a much more complex, potentially rewarding or repressive feeling, wrapped in unfamiliarity and self-consciousness or persistent self-assuredness in their foreign learning environment.   This thematic essence is an area that could be explored further, especially in the context of international education.  The lived experience of reciprocity delves into many existential elements and could include both international and domestic students.  At another level, the potential level of ICT support provided out of indebtedness and reciprocity pose important questions and opportunities in relation to asserting holistic, fair and effective policies and practices around academic honesty in a diverse campus setting.

In this vein, ICT presented itself as a voice of self-expression for the participants, and at times pushed them to the limits of their assignment parameters.  As an overarching representation of this challenge, this thesis has used the notion of the multiple "click" of an ICT rich learning environment, dominated by the computer.  This included the physical hardware itself to the hermeneutic click of icons on the screen, to the social context in which the meaning of different clicks are passed on from user to user.  As a synthesizing concept, the click works well; however, the anticipated difficulties with the physical aspect of using the mouse, for example, did not manifest.  Rather, it was the keyboard that emerged as an obstacle to the participants' academic performance.  With the technology of the pen and paper being ruled out for most assignments, the keyboard becomes the principle vehicle through which self-expression, and therefore demonstration of learning may be possible.  This intertwining of technologies conflated

the challenges faced by some of the participants, bringing to the fore the intersection of the physical human-computer interaction through the keyboard and the hermeneutic, multi-literate click of self-expression using ICT.  Self-expression through technology is thus another area that, from the research in this study, might be further explored with international students, reaching into the fields of instructional design and human-computer interaction.

It is important however to consider the ongoing development of ICT tools that make modern communications and technology mediated self-expression possible.  These tools, whether they are the keyboard, mouse or tablet and associated word processing, design or presentation software program, or something as yet marketed or invented, will inevitably require specific knowledge and skills, adaptation or transfer.  As Leo stated at one point, the need for ICT help "will not end tomorrow" because "[t]his knowledge is endless".  What rests upon faculty and staff dedicated to the academic success of international students is the responsibility to make an informed assessment of the potential obstacles such technological tools might pose during the transition period of an international student in their first year(s) of study in their new learning environment.

Assumptions based upon an individualistic approach to academic success and help seeking can ultimately result in the irony of empty ICT training sessions and poorly utilized help seeking support. While international students, not just those with limited or no ICT background, could use training and professional support to leverage ICT tools at more intermediate and advanced levels, in such a context the motivation for doing so may be perceived as remediation rather than self-improvement.  For international students to seek professional ICT assistance out of fear of failure reflects the priorities and values of

an institution, at many different levels. In that situation, the institution takes a distant

view, positing responsibility upon the international student to decide whether or not to

access professionalized support in the marketplace of student services.  In a diverse

campus setting, such a transaction is, by nature, replete with various, potentially

conflicting interpretations (Pope, et al., 2005).   The question that arises is not whether

international students with limited or no background with ICT will seek ICT assistance,

but rather, who they can and will ask based upon the conditions in which they study.  A

less integrated, less transparent ICT help seeking environment can possibly leave such

international students feeling vulnerable, distressed and self-conscious (Hamrick, et al.

2002; Pope, et al., 2005).  This can adversely affect their self-confidence in help seeking;

the very skill required to overcome their problem.  Avoiding situations where their

weakness is revealed to others perceived to be in authority or seniority, such international

students may choose to enact their help seeking with those closest to them, creating their

own chosen community of learners, including even family members or friends thousands

of miles away.   This may indeed seem a most natural inclination and healthy coping

mechanism; however, this can also be detrimental where a support network is limited or

breaks down unexpectedly.  At another level, as this support network may be

strengthened through indebtedness and reciprocity, the locus of loyalty may be external

to or only indirectly associated with the institution.

      Interrelating ICT help seeking with pre-arrival and arrival materials and

orientation, and course structure and assessment creates a different picture.  The details of

the technological tools required become integrated into the process of learning and

helping in a technologically rich, diverse learning environment.  In this respect, a social

constructivist, activity-centered perspective becomes not only a preferred basis for planning, but an ethical position, valuing ICT skills development in meaningful, collaborative, hands-on contexts.  The concept of ICT help provision in such a learning context can expand in capacity, reach and significance and ultimately leverage what may be happening anyways.  International students will continue to develop informal support networks amongst trusted peers, family and community members, regardless of a post-secondary institution's approach towards ICT support and related support programs. This acknowledges the resourcefulness and intuitiveness of international students in their search to adapt to a new learning environment marked by ubiquitous utilization of ICT. Viewed from a different angle, it poses a formidable task for ICT support at the level of one-on-one help provision.  Taking responsibility to address the depth of need that some international students may be facing with ICT and the unfamiliarity with how, who and what to ask for assistance, may require stepping back from entrenched practices and self-perceptions as ICT help providers.  In an era of increasing requirements to measure learning outcomes for diverse students and across post-secondary programs and units (Bauman, et al., 2005), accountability to the effectiveness of ICT support for international students may also need to be rethought.  Campuses need to expand their use and appreciation for diverse types of assessment data in order to make decisions about providing support that responds to the needs of international students.

This is especially true, if the metaphor of feeling "lost" that emerged from the participants' anecdotes and reflections is taken seriously.  As a physical and psychological analogy, being lost in the forest and experiencing wood shock presents a complex picture of what international students may be feeling when they face difficulties

with ICT: they may deny to themselves that they are indeed lost and keep going deeper into their problem, getting further and further away from where they started and making it harder for them to emerge from their state of mind.  Living on the prairie, the concept of getting lost in a forest is a foreign concept.  While there are forests, the trees are thin and the landscape moves from silver willow and low brush to aspens and poplars, the horizon visible and the sun above a guide.  When I moved to Thunder Bay and went with my family for a 10 kilometre hike in Sleeping Giant National Park, I knew that if my son were to stray but 10 meters into the thick forest underbrush, he could be lost to us for hours, possibly forever.  It is the depth of the feelings of being lost, of not knowing how to get out of the situation one is in, that makes ICT help seeking unique.  ICT is embedded into the lifeworld shape of Canadian post-secondary institutions, and so like a prairie child entering a Northern Ontario forest, while ICT may not be entirely foreign to an international student, the extent of its integration into academic and daily life is and can, very quickly, feel overwhelming, disconcerting and disorienting.

This depth of lived meaning brings to mind Leo who spoke of reaching points of exasperation, struggling with retyping page numbers each time he edited his word processing document, feeling totally helpless and sitting in a lab for hours waiting for someone to find and help him.  Like Leo, many of the participants spoke of not expecting the technology to be so pervasive and, ill equipped for the ICT requirements of their studies, felt beaten, defeated, nervous and anxious.  For Leo and the participants in this study, the knowledge and skill to succeed in a lifeworld shape marked by ubiquitous ICT integration came through learning and interacting with peers or help providers who knew the ICT landscape well.   These were help providers who took the time to pull out a map,

point to a pathway, and not only show where to go next, but lead them out of the forest. Indeed, it is Leo who pointed out that, as with many things in life, opportunity may lie in the challenge itself. He responded to his own question as an international student who has faced difficulty with ICT, "[W]ho is going to help me overcome that limitation? […] People who are ready to share their knowledge." Of these people, Leo considers himself one of these potential help providers, as did all of the participants, to some degree. Out of their struggle with learning ICT came compassion and determination to help other international students like themselves.

As Leo also stated, the conundrum is that this situation will not change over time. New technologies will develop and old ones will become foreign. We should aim to design the best individualized instruction possible, the most effective method to provide ICT assistance, or the most ICT integrated course assignment possible. Yet, no matter what we do, we must remember the limitations and limitless possibilities inherent in ICT help seeking. We must consider the extended and amplified affirmation and indebtedness that may come from taking the time to provide tactful, holistic ICT assistance to international students with limited or no background with ICT. Realistically, as post-secondary faculty and staff we may not be able to replicate the depth of peer-to-peer loyalty described by the participants in this study. Nevertheless, as professionals in the post-secondary sector we can seek to grasp the depth of need that may exist for international students seeking ICT assistance and respond appropriately. Of equal importance is the possibility that, with focused, collaborative effort, we can create the conditions for peer-to-peer reciprocity to flourish amongst international and domestic

students.  To do this is to open to their search for not only academic success, but for

communion, in a diverse, global society made possible through emerging technologies.

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