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Literacy Practices through a Socio-cultural Lens**

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**A Case Study of Adult Deaf Literacy Learners:  
Literacy Practices through a Socio-cultural Lens**

**Meagan Roberts**

A thesis submitted to the  
Faculty of Graduate and Postdoctoral Studies  
in partial fulfillment of the requirements  
For the degree of Masters of Arts in Education

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### **Abstract**

The purpose of the study was to examine a literacy program serving Canadian deaf and hard of hearing adults, through a socio-cultural perspective of learning. A provincially-funded literacy program for deaf adults provided an opportunity to understand the dynamics of literacy learning within a richly cultural environment. Theories of situated learning and situated cognition were used to examine learning within six literacy learning settings. The findings of the research study showed evidence of situated learning and communities of practices. Four socio-cultural themes emerged from the findings: ASL as a shared language, roles of instructors, new literacy practices and personal development. The socio-cultural elements played a role in the lived experiences of the learners and helped shape the students' identities as deaf literacy learners. The findings of the study provide new insights on how literacy learning can be embraced using a socio-cultural perspective and deepens our understanding of deaf literacy learning.

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## **Chapter 1: Introduction**

In the eyes of modern society, disabled people have lagged behind their hearing counterparts with respect to literacy, employment levels and educational attainments (British Columbia Paraplegic Association, 2004; Elwan, 1999; HRSDC, 2009; Kapsalis, 1999; Livingstone, 2000; Macht, 2000). Literacy skills have been shown to be related to education, employment earnings and employment status (Statistics Canada, 2005). Adults with disabilities are more likely to have lower literacy levels and are more likely to struggle with education and employment compared to adults who are not disabled (HRSDC, 2009; Kapsalis, 1999). Literacy has become de-contextualized into a singular commodity that forms the foundation of modern society in light of social, economical and political factors. From both practical and political perspectives, the context in which literacy is situated has direct implications for all individuals (Czubek, 2006). Gee (2003) has proposed that literacy is limitless and takes on “different meanings in different situations, contexts, practices, cultures, and historical periods” (p. 18). As this study demonstrates, an understanding of the lived experiences of deaf and hard of hearing adults in literacy programs is key for the wider acceptance of culturally-appropriate programming that takes into account a multi-dimensional view of literacy. This understanding, in turn, will lead to the improvement of teaching and learning interactions within this context.

### **Literacy: Past, Present and Future Contexts**

From a theoretical perspective, literacy education, including adult literacy education, has evolved significantly over the years so that the field has become much broader in definition (Fleming, 2009). Traditionally, literacy was considered to be seen as “neutral, technical skill” (Street, 1995, p. 1). According to Gee (2008), the traditional meaning of literacy is linked to reading and writing and therefore, literacy becomes situated in the individual learner rather than

society or the socio-cultural setting. Street (1995) proposed that we should embrace a new direction of literacy, or in other words an 'ideological model', in which literacy is a social practice and is inherently embedded in socio-cultural contexts. In present times, there has been a shift from the traditional model of literacy to a social model of literacy (Street, 1995).

Conceptually, literacy as a practice is essentially social and it can exist within a cultural context, allowing it take on countless forms and numerous meanings (Barton & Hamilton, 2000a; Brandt & Clinton, 2002). Literacy can be deeply ingrained in the cultural practices in which individuals become aware of their "values, attitudes, feelings and social relationships" (Barton & Hamilton, 2000a, p.7). The idea of literacy should go beyond the functional tasks of reading and writing and focus more on the tightly woven network that consists of language learning, the individual and the community (Evans, 2004).

Literacy can exist in multiple dimensions, allowing it to become situated in various contexts for different purposes (Brewster, 2004; Hamilton, Hillier, & Tett, 2006; Rogers, Mosley, & Kramer, 2009). The broad nature of literacy can be defined accordingly through the various "ways in which we act out our uses and meanings of reading and writing in different social contexts" (Street, 1994, p. 139). In other words, the multiple meanings of literacy and the contexts that it occurs in can be associated with 'multiliteracies' (Cope & Kalantzis, 2000). Multiliteracies can include information literacy, media literacy, visual literacy, oral literacy, sign literacy, mathematical literacy and performance literacy and so on (Masny, 2009; Paul, 2006). Our multiple representations of literacy "shape how we engage and make sense of the world, including how we use language" (Worthman, 2008, p. 446). Paul (2006) posed an important question: "Are all literacies equal [...] with respect to the demands of society...?" (p. 383). Socio-cultural researchers have challenged the idea of a singular definition of 'literacy' because

it exists in different social and cultural contexts (Barlett, 2007; Evans, 2004; Moje & Luke, 2009; Paul, 2006; Worthman, 2008). Over time, it has expanded to a broader view that takes into account diverse socio-cultural contexts in which literacy is situated.

Literacy learning through a socio-cultural perspective or a social model looks at literacy as a set of practices. Literacy as a set of practices is essentially “what people do with literacy” (Barton, 2006, p. 22). Literacy and the events it is situated within can be seen as culturally situated events (Goodman & Goodman, 1990; Scribner & Cole, 1981). The concept of literacy being situated within their cultural or socio-cultural contexts can apply to deaf people as well as the Deaf community. Deafness is a social construction and members of the Deaf community consider themselves to be part of a linguistic minority group, or more appropriately, a cultural group with their own norms and values (Lane, 2005; Senghas & Monaghan, 2002). Wilcox (1994) shares that “if deafness can enable people to view the world differently and that knowledge is actively constructed [in interaction with their world], then we will expect that deaf people might arrive at a different understanding of the world than hearing people do” (p. 110). Within a socio-cultural perspective, it is clear that for deaf learners, culture knowledge is not learned solely *from* experience, but *within* the experience (Wilson, 1993). This is where we can begin to close the gap between theory and practice concerning literacy practices, especially when considering the differences in the construction of knowledge between deaf adults and their hearing counterparts. Therefore, reducing this particular gap may lead to proliferation in culturally-sensitive literacy programs for the deaf and a greater awareness of how literacy is used, valued and situated within different perspectives.

What can be said of the future direction of research and practice in literacy? It is certainly not unilateral nor is it linear. The field of literacy studies is an ever-expanding, ever-changing

network in which the multiple purposes and meanings are continuously contested (Cope & Kalantzis, 2000). The utilization of literacy within the greater context of society can be “potentially empowering, emancipatory or even oppressive” (Worthman, 2008, p. 446). Therefore, the idea of literacy being defined as “multiple [in sense] is an integral part of the socio-cultural lives of individuals and communities” (Paul, 2006, p. 384). The various socio-cultural approaches to literacy are beginning to consider the role of identity and identity formation through literacy practices within different social and cultural contexts (Barlett, 2007). Literacy as a social practice has led researchers to recognize that the identities of literacy learners can be nurtured and developed through various forms of literacy practices and events (Lewis & del Valle, 2009). Within this recent concept, a socio-cultural approach to learning involves an exploration of the intricate relationships and communities formed by the learners themselves within different contexts, which can show “how people make sense of themselves and others, identify, and are identified” (Moje & Luke, 2009, p. 416). The development of a learner’s identity from a social perspective is “an ongoing social process of self-making in conjunction of others through interactions” (Barlett, 2007, p. 53). Therefore, within the context of this study, literacy learners embark on a journey of lifelong learning, in which they learn to explore and develop their identities within a social context and through social interactions.

### **Painting a Picture of Canadian Literacy Levels**

The 2003 International Adult Literacy and Life Skills Survey (IALSS) looked at the literacy, numeracy and problem-solving proficiencies of Canadians aged 16 to 65 in all ten provinces and three territories. Proficiencies in the three domains were each assessed on a five-point scale ranging from Level 1 to Level 5. Individuals that were at the lowest levels (Level 1) had very low literacy skills whereas individuals at Level 2 could understand simple, straight-

forward material but may have difficulty with more complex concepts. Individuals who were at Level 3 were considered to be placed in “the [minimum] ‘desired level’ of competence for coping with the increasing skills demands of the emerging knowledge and information economy” (Statistics Canada, 2005, p. 9). Levels 4 and 5 pertained to adults who had the literacy skills beyond a high school level. The survey found that 48 percent of the adult population, or approximately 12 million Canadians, were deemed to be below Level 3 on the prose and document literacy scales (Statistics Canada, 2005). In other words, they did not have the literacy skills they needed in order to meet the demands of today’s society (Movement for Canadian Literacy, 2005). The 2003 IALSS did not consider whether the respondent had a specific disability, such as hearing impairment, which could reveal new information on whether literacy was influenced by the nature of the disability. The IALSS data showed that the literacy needs of adults with disabilities had not been met and efforts to alleviate low literacy levels were minimal (Longfield, 2003). As stated by Literacy Alberta (2004), our society is becoming more technologically-driven and information-based in terms of literacy learning and yet, we must recognize that adults with disabilities are still being left behind. A fuller discussion about literacy levels appears in the next chapter. Subsequently, the next section discusses literacy levels, employment outcomes and educational attainment for adults with disabilities; thereby, framing the study within the context of deaf literacy.

### **Literacy, Employment Levels and Educational Achievement for Adults with Disabilities**

Research suggests that there is a striking contrast between the general population and the disabled population in Canada in terms of literacy levels, educational achievement, employment qualifications and employment status (British Columbia Paraplegic Association, 2004; Elwan, 1999; HRSDC, 2009; Livingstone, 2000). The 2003 IALSS found that literacy was directly

linked to education, earnings and employment status (Statistics Canada, 2005). Adults with disabilities face significant barriers with respect to employability compared to their non-disabled counterparts. In contrast to the adults without disabilities, adults with disabilities were more likely to struggle with literacy and education as well as have lower levels of employment (HRSDC, 2009; Kapsalis, 1999; Macht, 2000).

In recent times, there have been improvements in the employability of Canadian adults who are disabled. Between 2001 and 2006, the employment rate for Canadian adults with disabilities increased from 49.3 percent to 53.5 percent (HRSDC, 2009). In contrast, for the same time period, the employment rate for Canadian adults who did not have a disability increased from 73.8 percent to 75.1 percent (HRSDC, 2009). It is evident that Canadian adults with disabilities still face significant barriers to equality and employability with respect to the Canadian workforce. The Participation and Activity Limitation Survey (PALS), conducted in 2006, found that approximately 1,266,120 or five percent of the Canadian population aged 15 and over reported having a hearing impairment, but only half reported being employed (Statistics Canada, 2009).

The educational achievement levels for Canadian adults with disabilities do have a profound effect on literacy levels. The educational attainment of deaf and hard of hearing people in Canada is lower than the general Canadian population. For adults who were deaf/hard of hearing, over half (50.2 percent) reported that their highest level of educational achievement was high school or below (Statistics Canada, 2009). The 2006 PALS indicated almost 40 percent of deaf and hard of hearing Canadians revealed that choices pertaining to education and employment were determined by their hearing limitations (Statistics Canada, 2009). It is evident that many deaf and hard of hearing Canadians may not have the necessary literacy skills,

employment experience or adequate education to enter the general labour force. In the next section, the contextual history of adult literacy learning and programs for the deaf are provided in order to situate the study within socio-cultural contexts.

### **Adult Literacy Learning and Programs for the Deaf**

Adult literacy learning has become a focus of interest for researchers, educators and policy makers at both the provincial and federal level in response to greater employability for Canadian adults (Statistics Canada, 2007a). In response to the increase in the availability of literacy and adult basic education programs, learners are starting to bring with them a body of knowledge and experience that can be shared with other learners and practitioners (Greene, 2007). Literacy programs enable learners to participate more fully in the greater context of society whether the learners' goals are related to independent living, academic or employment. Canada's economic prosperity depends on having an influx of knowledgeable, skilled and capable individuals functioning together as a productive society (Statistics Canada, 2008).

Despite calls for improvements in literacy levels, Canada was one of the few OECD countries without a well-coordinated national plan to curb low literacy levels (Longfield, 2003). Traditionally, challenges and changes in issues pertaining to literacy were left up to the literacy programs and organizations alone (Movement for Canadian Literacy, 2005). There was no fully coordinated plan to guide literacy within the province of Ontario, which prompted the Ministry of Training, College and Universities (MTCU) to create the Literacy and Basics Skills (LBS) program in 1999 (MTCU, 2000). The LBS program was funded in part by the federal program through the National Literacy Secretariat, and offers learner-centred literacy services (Deaf Literacy Initiative, 2003; MTCU, 2000). Prior to the formation of the LBS program, literacy for the deaf was supported by an organization called GOAL: Ontario Literacy for Deaf People

(GOLD), now known as Deaf Literacy Initiative. Within this provincial organization, local umbrella organizations across the province of Ontario were able to provide literacy and adult basic education program services to deaf and hard of hearing adults. There are now 14 Deaf LBS programs as of date available to adult learners across the province of Ontario who can be identified as deaf, hard of hearing, or deaf-blind.

Furthermore, the introduction of a “Pan-Canadian literacy and essential skills development system” called for the alleviation of low literacy levels through partnerships between federal, provincial and territorial governments, literacy organizations and stakeholders (Longfield, 2003). The National Literacy Action Plan (2006 to 2016) was proposed in 2005 by the Movement for Canadian Literacy along with six other Canadian literacy organizations. The action plan called for all Canadians to have “access to free, high quality literacy training and upgrading to high-school completion...” (Movement for Canadian Literacy, 2005, p. 1). Despite recent changes in policy and practice regarding the implementation of adult literacy programs for the deaf, there has been little research on showing how these programs do meet the needs of both the deaf and hard of hearing adult population in the province of Ontario and at a national level. As I argue in depth below, moving towards a socio-cultural view of literacy can potentially increase the number of culturally-sensitive literacy programs as well as a broader, more encompassed view of how literacy can shape the lived experiences of deaf and hard of hearing learners.

### **Assumptions of the Researcher**

I was diagnosed with permanent bilateral sensorineural hearing loss as an infant and consider myself to be profoundly deaf. I was educated as an auditory/oral deaf student and was mainstreamed into the public school system at five years of age. A deaf person who is

auditory/oral has elected to use speech and lip or speech reading as a mode of communication. Deaf individuals who are not auditory/oral use sign language to communicate with other people and many of them consider themselves to be culturally Deaf and therefore belong to a cultural group. I do not consider myself to be a member of the cultural Deaf community and I am not fluent in sign language. However, I have familiarity with the norms, values and ideologies that contribute to the unmistakable cultural and linguistics characteristics of the Deaf community. Even though I do not consider myself to be a member of a cultural group, being a deaf researcher helped facilitate the establishment of rapport and mutual respect with the deaf adult learners of the LBS program site. My interest in deaf literacy is genuine and I have an interest in seeing how literacy is developed over a continuum as deaf individuals share similar and yet different abilities in terms of how meaning is constructed in literacy activities. Lastly, I have no formal connections to any of the Deaf LBS programs, instructors or learners that were part of this study.

### **Definition of Terms**

The following definitions will be defined to provide readers with a clearer outlook on the direction of the study and its underlying purposes.

**D/deaf, hard of hearing and deafened learners.** It is important to distinguish between the different groups of deaf people in terms of cultural identity and hearing status. Individuals who are *Deaf*, as noted with a capital *D*, are culturally Deaf and belong to a cultural, linguistic minority group. Many of these Deaf individuals belong to a Deaf community or a Deaf-World to be more specific (Lane, 2005). Sign language is the primary means of communication and there are certain norms and values associated with this unique group of individuals. On the contrary, individuals who identify themselves as *hearing impaired* or *deaf*, as designated with a lowercase *d*, are part of a much larger and more heterogeneous group than individuals identifying

themselves to be part of the Deaf-World (Lane, 2005). Hearing impaired or deaf people typically consider themselves to be part of a 'hearing world' and do not primarily use sign language as a means of communication, but rather spoken English or other languages (Lane, 2005). A person who is identified as *hard of hearing* is someone who has "residual hearing sufficient to enable successful processing of linguistic information through hearing" and may utilize the use of hearing aids (Rodda & Eleweke, 2000, p. 102). Individuals who are hard of hearing may identify themselves to be 'hearing impaired' and for the most part, do not typically associate themselves with the Deaf community. Lastly, individuals are who are *deafened* originally had normal levels of hearing at birth but lost their hearing due to a medical condition or age at a later stage in their lives.

**Literacy.** For the purpose of this study, the description of literacy that best fits the contexts of the study comes from the social perspective of literacy. The social definition of literacy emphasizes the importance of what learners do with literacy and how they identify with it rather than taking a skills-based approach that is of a reductionist nature (Barton & Hamilton, 2000a; Compton-Lilly, 2009; Larson, 2008; Rogers et al., 2009). It is important to recognize that "literacy is less of a state of being and more an ongoing, continual accomplishment" (Barlett, 2007, p. 53). Therefore, learners may experience changes in the way they perceive literacy and how they utilize it within different social and cultural contexts.

**Situated cognition.** The theory of situated cognition, as defined by Brown, Collins and Duguid (1989), considers the process of learning and the development of knowledge and skills to be situated in everyday activities within different social and cultural contexts. Furthermore, for the context of this study, situated cognition can be referred to as the shifting of the individual as

the unit of analysis to the socio-cultural setting in which the learning activities are situated (Kirshner & Whitson, 1997).

**Situated learning.** Situated learning differs from situated cognition in the notion that the process of learning is situated in the domain in which it occurs rather than the internalized processes through which it can occur. According to Lave and Wenger (1991), learners participate within an external domain and embed themselves in cultural contexts in which meanings can be derived from their activities, tasks, functions and understandings. Therefore, within an adult education context, as proposed by Stein (1998), “to situate learning means to create the conditions in which participants will experience the complexity and ambiguity of learning in the real world” (p. 1).

**Communities of practice.** Situated learning can give way to the development of communities of practice, a concept introduced by Wenger (1998, 2007), in which the members of a group, newcomers and old-timers alike, share a common goal in a particular domain of learning. Communities of practices have three elements: a domain of interest, a community of people sharing the same goals and a practice in which the community develops a shared repertoire of tools and resources (Wenger, 2007).

### **Significance of the Study**

This study enhances our understanding of deaf literacy through a socio-cultural lens in which learners achieve a deeper sense of what it means to be literate within a social context through relationships with other learners in the learning environment (Kirshner & Whitson, 1997; Taylor, Pinsent-Johnson, & Lothian, 2003). Consequently, this study examined the literacy learning experiences of deaf adult learners who were newcomers to Canada, immigrants or refugees. A socio-cultural theory of learning is beneficial because it reveals new ways of

teaching and learning within deaf literacy that can be adapted by other literacy programs that also serve deaf and hard of hearing adults. Research using the socio-cultural approach centres on the idea that learning in context relies on the intricate relationships and interactions between learners, tools and context within a learning situation (Barton & Hamilton, 2000; Brown et al., 1989; Hansman, 2001; Jacobson, 1996; Kirshner & Whitson, 1997; Wertsch, del Río, & Alvarez, 1995). Since this study used a socio-cultural lens, an interactionist approach was utilized for the purpose of data collection. An interactionist approach considers “the use of language as social action and the understanding of language as based in human interaction in the various contexts available in the social semiotic of a given culture” (Smith, 1994, p. 43). In this study, social interactions between the learners and instructors in the deaf literacy program allowed literacy to emerge as a social practice, in which it was inherently situated and valued by the learners and instructors. The use of situated cognition in adult education settings has shown to be a promising theory, in which learning is seen as a social and cultural phenomenon (Brown et al., 1989; Hauer & Taylor, 2008; Kirshner & Whitson, 1997; Taylor & Blunt, 2001).

*Investigation of how deaf and hard of hearing adults learn through a socio-cultural perspective using situated cognition and situated learning allow for new teaching and learning strategies to emerge within various social and cultural contexts. The use of situated cognition and situated learning in deaf literacy programs extends to other literacy programs that offer specialized services to adults with disabilities and narrow the gap between disabled and non-disabled adult learners.*

## **Research Questions**

This study explored the literacy practices of adult learners in an adult literacy program that are specifically designed for deaf and hard of hearing adult learners. The study used a socio-cultural lens that was guided through the theories of situated cognition (Kirshner & Whitson, 1997) and situated learning (Lave & Wenger, 1991; Stein, 1998). The primary research question of this study was: “How do the socio-cultural elements of a Deaf Literacy and Basics Skills program facilitate the literacy learning of deaf and hard of hearing adults?” The study acknowledged the voices of the learners themselves and brought forth a new issue in deaf literacy: the inclusion of deaf newcomer adult learners. As noted in my literature review below, there has been little focus on deaf newcomer adult learners in the literature. This gap in the literature has led to the consideration of two secondary research questions: “How are deaf newcomer adult learners integrated in Deaf Literacy and Basic Skills programs?” and “What are the barriers encountered by the deaf adult learners, deaf newcomer adult learners and instructors in Deaf Literacy and Basic Skills program?” As I discuss in regards to the implications for this study, this research is intended to help reduce the gap between theory and practice in regards to deaf literacy issues and contribute to an understanding of how these deaf literacy learners define what deaf literacy means for themselves in their own words.

## **Chapter 2: Literature Review and Conceptual Context**

In order to understand the dynamics of literacy learning in deaf adult literacy programs in the context of this study, it is necessary to undertake a thorough literature review of what is currently known about adult literacy learning, communities of practice, deaf literacy and English as a Second Language (ESL) literacy, and literacy for deaf learners who are newcomers to Canada. The role of deaf newcomers to Canada was integral to this study as they made up a large proportion of the learners who were enrolled in the Deaf LBS program that was part of this study. Therefore, their views and reflections on their literacy learning experiences provided a unique perspective to the subject of deaf literacy. The conceptual context guiding the study will follow the applied literature review and will draw upon the theories of situated cognition, culture as a situated cognition, situated learning and situated learning and adult education.

### **Literature Review**

#### **Adult Literacy Learning**

Current literature and research on the subject of adult literacy learning has seen substantial growth in the last two decades (Statistics Canada, 2007a). The study and practice of adult education has grown to become a formalized body of work that includes the advocacy and discussion of issues pertinent to adult learners in times of changing society and economies (Boucavalas, 2002). The discourse on adult literacy learning can be viewed from three definitions of adult literacy: (1) functional literacy; (2) critical literacy; and (3) literacy as a social practice. There are now competing definitions of literacy due to the increasing demands of modern society that has led us to become more technologically-driven and information-based (Demetron, 2001; Ozanne, Adkins, & Sandlin, 2005). Within the realm of adult literacy learning, it is important to frame the context in which learning is situated according to the

perspective of literacy that is chosen. Therefore, the literature review on adult literacy learning will be examined through the three competing definitions of literacy with further applications to deaf adult literacy.

**Functional literacy.** From this functional literacy perspective, literacy is defined as a set of skills that can be applied in various contexts but does not take into account the socio-cultural elements that may shape the role of literacy (Sandlin, 2000). According to Ozanne et al. (2005), a functional approach to literacy sets aside the importance of the journey that the adult learner embarks on and as well the construction of a literate identity. The functional literacy perspective emphasizes the importance of the adult learner having the ideal amount of literacy skills in order to contribute to the greater good of society. Individuals who are functionally literate perform better in the labour market and therefore, contribute to a knowledge-based and technologically-driven society (Statistics Canada, 2006).

Functional literacy can be best exemplified by the results of the 1994 International Adult Literacy Survey (IALS) and the 2003 IALSS. Both surveys used a five-point scale to assess the literacy levels of respondents in four key domains: prose literacy, document literacy, numeracy and problem-solving. The problem-solving domain was absent from the 1994 IALS survey as it was a new addition to the 2003 IALSS. A description of this scale can be found in the first chapter of this thesis. The results of the 1994 IALS garnered nation-wide attention from educators, researchers and policy makers when it was revealed that the rate of illiteracy for adults was higher than originally predicted. Furthermore, the results of the 2003 IALSS found little improvement in literacy rates compared to its predecessor, the 1994 IALS (Statistics Canada, 2005). The IALSS data found that 48 percent of the Canadian population or almost twelve million people aged 16 and over were placed in the two lowest levels of literacy in the prose and

document domains (Statistics Canada, 2005). This was comparable to the results of the 1994 IALS in which 46 percent of Canadian adult respondents were found to be below the standard Level 3 benchmark in the prose and document domains (Statistics Canada, 1996). The IALS showed that the incidence of illiteracy is higher for adults who have disabilities with low literacy skills (49 percent) compared to adults who do not have disabilities (37 percent) and the nature of the disability may have a direct influence on the literacy skills of the individual (Kapsalis, 1999). However, the IALS definition of what constitutes as a disability is limitless and it is not known whether respondents' disabilities were permanent or not (Kapsalis, 1999).

The 2006 PALS found that the disability rate for Canadians between the age of 15 and 64 is nearly 11.5 percent and increased dramatically to 43.4 percent with the inclusion of Canadians aged 65 and over (Statistics Canada, 2007b). Five percent of the Canadian adult population reported having a hearing impairment but only half were employed (Statistics Canada, 2009). The 1994 IALS and 2003 IALSS both found that literacy was directly linked to education, earnings and employment status (Statistics Canada, 1996; Statistics Canada, 2005). Despite calls for improvements of literacy rates, data from these surveys have shown that the literacy needs of Canadians with disabilities have yet to be addressed (Longfield, 2003).

The results of the 1994 IALS and 2003 IALSS brought forth a sense of urgency with respect to unexpected levels of low literacy across Canada as a country. Several literacy researchers have questioned the validity and purposes of the IALS and IALSS data (Bernardo, 2000). On the other hand, the IALS and IALSS have been praised for its theoretical and practical components (Darcovich, 2000). Both critics and advocates of the IALS and IALSS created two opposing positions: literacy for functional purposes and literacy for socio-cultural purposes (Druine & Wildemeersch, 2000). In both the IALS and IALSS, literacy became re-

conceptualized as a commodity and took on a functional approach, in which the individual's level of literacy was based on his or her abilities across a range of competencies to be demonstrated in a knowledgeable society (Bernardo, 2000). A 1996 report from Statistics Canada stated, "Society rewards individuals who are proficient and penalizes those who are not, whether expressed in terms of employment opportunities and job success or active social, cultural and citizenship participation in society" (p. 1). By situating literacy within an economic perspective, the IALS and its survey creators did not consider the existence of multiliteracies and whether they could be culturally-derived or valued in the contexts in which they were situated (Druine & Wildemeersch, 2000).

Hamilton and Barton (2000) argued that literacy only had meaning according to the social context in which it was situated and that it could transfer across different social practices over time. The IALS only provided a partial picture of literacy in which literacy became misrepresented by the IALS authors' claims that IALS actively sought to "represent all of literacy" (Hamilton & Barton, 2000, p. 380). The social perspective of literacy values the role of culture and the IALS had diminished the issue of cross-cultural differences among the survey respondents. The authors suggested that defining literacy as a set of skills limited the role of literacy in society and did not take into account the social contexts that allowed literacy to flourish as a social practice.

The results of the 1994 IALS led to a new outlook on what constituted functional literacy among the adult population (Hautecoeur, 2000). A person's literacy proficiency became defined in the person's ability to "handle written information in different contexts of individual and community life" (Hautecoeur, 2000, p. 357). Flewitt, Nind and Payler (2009) noted that "perceptions of individuals' literacy competence necessarily pivot on understandings of what

literacy is” (p. 212). Sticht (2000) found that respondents’ self-assessment results differed considerably from their corresponding performance results. Critics of the IALS suggested that literacy was redefined in order to ideally match the needs of a knowledge-based society (Hamilton, 2001). Furthermore, literacy became privileged in the notion that the IALS “[justified] a vision of what literacy should be, rather than being based on peoples’ lived experiences” (Hamilton, 2001, p. 184).

**Critical literacy.** Critical theorists argued that in recent times, many adult education programs have placed too much emphasis on skills acquisition without considering the demographics of the literacy learners who are enrolled in the programs (Degener, 2001). It has been proposed that one of the main goals of critical theory from a literacy perspective is to “improve educational and social welfare of underrepresented or powerless groups” (Paul, 1998a, p. 122). While acquisition of skills could be considered beneficial to the individual learner, adult education programs still utilize a formalistic ways of learning which does not allow the learner to achieve his or her full potential (Larson, 2004). Advocates of this view of literacy call for literacy practitioners to situate literacy learning within a framework of “social activism and societal transformation” (Degener, 2001, p. 27). Literacy can be seen as a form of power or commodity among certain social groups and within the critical theory lens, people who are less literate are considered to be less important to society as a whole (Kilgore, 2001). Suggestions has been made to address the importance of inclusive measures and equity in literacy education, which is a field that is primarily geared towards a standardized approach to adult education (Morrell, 2009). The Deaf community was forced to accept the notion that the dominating language of the larger community, such as English or French, was important for success in the educational, social and employment areas (Bochner & Bochner, 2009).

The use of critical literacy as a theoretical framework was a contributing factor to the establishment of American Sign Language (ASL)/English bilingual education programs for deaf students (Paul, 1998a). Since the early 1990's, there has been a growing shift towards the implementation of ASL/English bilingual educational programs for the deaf (Simms & Thurman, 2007). Previous research on deaf literacy focused on the reading and writing deficiencies of deaf people (Paul, 1998a). Proponents of the critical theory within the field of deaf literacy studies addressed the need for researchers and practitioners to recognize the relationship between literacy and Deaf culture, which may result in the improvement of reading and writing skills of deaf people (Paul, 1998a). Critical literacy enabled deaf and hard of hearing people to become empowered and develop a literate identity that was characteristic of the deaf community (Christie & Wilkins, 1997). Paul (2006) advocated for the recognition of ASL as literacy in its own right. ASL as a language is both rich and vibrant. Gestures, body language and facial expressions become the pillars in the development of ASL as a recognized language that belongs to a minority group that is vastly underrepresented in the grand scheme of adult literacy learning.

**Literacy as a social practice.** A third perspective within the discourse of adult literacy learning is the social theory of literacy, in which literacy can be seen as a set of social practices that enable individuals to interact and intersect with each other (Barton & Hamilton, 2000). Literacy is embedded into the social practices and meaning can be drawn from the lived experiences of those who partake in these social practices (Street, 1995). Literacy practices are the “general cultural ways of utilizing literacy which people draw upon in particular situations” (Barton, 2001, p. 96). The practices that exist within social and cultural contexts are “shaped by the social rules which regulate the use and distribution of texts” (Barton & Hamilton, 2000a, p. 7). There can be different literacies that exist in different domains of life (Barton & Hamilton,

2000b). Using a social theory of literacy as the basis for adult literacy learning calls for the incorporation of “the learners’ developmental needs, ideas and cultural context into the learning experience” (Hansman, 2001, p. 44). Moreover, a social perspective of literacy puts emphasis on literacy practices changing over time and new practices being acquired on the basis that it allows individuals to assess its value and contribution to their everyday lives (Barton & Hamilton, 2000a; Barton, 2006). The power and dominance that literacy practices carry are shaped according to the context in which they are situated (Barton & Hamilton, 2000a; Barton, 2006; Street, 1995).

Literacy as a social practice has shown to make a valuable contribution to the socio-cultural theory of learning. Taylor and Blunt (2001) examined the possibility of viewing adult literacy learning through a socio-cultural lens as a means to pave new research pathways and directions for adult literacy learning. The discourses of the four domains of literacy practices (community-based literacy, workplace literacy, family literacy and school-based literacy) were investigated using a template that was based around the four elements of situated learning (content, context, community and practice). The study was centred around the examination of articles on literacy programs that belonged to one or more domains of literacy practices. The findings of the study determined that literacy discourses benefited from a social theory of literacy and the elements of situated learning provided alternative ways of looking at literacy.

Taylor (2006) found that adults with low literacy skills found ways of engaging in informal learning and everyday literacy practices. Using the five-point literacy scale of the 1994 IALS, the engagement of adult participants at Level 1 and Level 2 was investigated with respect to literacy practices in their homes, at their workplaces and in the greater community. Five literacy coordinators across Canada were trained in ethnographic research principles in order to

extract data, which was facilitated by the theoretical frameworks of situated cognition, situated learning and informal learning practices.

In Taylor's (2006) study, three key themes emerged from the data: life roles, situated learning environments and practices of everyday literacy activities. Strong family values, connections with the community and vocational interests contributed to the engagement of an adult learner in regards to meaningful informal literacy practices. Taylor (2006) found that situated learning environments such as the home, workplace or the community allowed the adult learner to participate in informal literacy practices that were situated around the adult learner's life roles. Everyday literacy activities such as oral communication skills, computer skills, numeracy and literacy materials that take a real-world approach were all beneficial to an adult learner's informal learning within a social context. Although the findings were relevant to the social theory of literacy, the collection of data was predetermined by the training provided to literacy practitioners regardless of their research backgrounds. There may be question as to whether there were any derivations in the sampling of data between literacy practitioners because their locations were spread out across Canada. Therefore, the transferability of the findings may not be as concrete if the sampling had differed between literacy practitioners. Taylor (2006) suggested that adults with low literacy skills engage in informal learning and everyday literacy practices that were situated within a social context and therefore, lent themselves to the socio-cultural lens of adult literacy learning.

A social view of literacy can be used as a tool to examine the realm of adult literacy learning within social and cultural contexts. From this perspective, literacy is not only seen as a set of acquired skills, but more importantly, it includes how we interact and make meaning of the literacy practices that we embed ourselves in. Therefore, a social perspective of literacy may be

able to help illuminate the key elements that form the basis of literacy learning for deaf and hard of hearing adults in socio-cultural learning environments.

### **Communities of Practice**

Learning can be embedded in individuals' participation in communities of practices, which can be situated within historical, cultural and social contexts (Lave & Wenger, 1991). The concept of practice is rooted in the idea that it is "doing, but not just doing in and of itself. It is doing in a historical and social context that gives structure and meaning to what we do" (Wenger, 1998, p. 47). Learning as social participation is rooted in the social theory of learning where individuals engage in activities with certain people (Wenger, 1998). Furthermore, it allows the formation of practices of communities that enable individuals to develop their identities around these communities of practices. According to Wenger (1998), there are three characteristics that form the foundation of a community of practice: mutual engagement, joint enterprise and a shared repertoire. Members of a community of practice find themselves mutually engaging with each other in various social milieus. Secondly, members have a shared objective that members work towards. Thirdly, a shared repertoire of resources, tools, languages and routines are developed by the members of the community of practice. The shared repertoire include the discourses by which members create meaning out of their learning experiences and further develop their identities within the community of practice.

Communities of practice can further develop into highly structured learning communities in which members "inquire into their practice, and, as a result, discover, create, and negotiate new meanings that improve their practice" (Skerrett, 2010, p. 648). Lave and Wenger (1991) consider the role of participation to be pivotal, in which "participation in the cultural practice in which any knowledge exists is an epistemological principle of learning" (p. 98). The underlying

principles of communities of practice allow members to “construct social roles and identities in relation to one another through active participation in particular communities of practice” (Warriner, 2010, p. 23). Legitimate peripheral participation is when “the incorporation of learners into the activities of communities of practice, beginning as a legitimated (recognized) participant on the edges (periphery) of the activity, and moving through a series of increasingly expert roles as learners’ skills develop” (Watson-Gegeo, 2001, p. 24).

Warriner (2010) examined how adult ESL learners, specifically three refugee women, in local communities of practices transferred certain practices and forms of engaged participation of one community of practice to a different community of practice. Legitimate peripheral participation enabled the refugee women to engage, learn and adopt the practices of the ESL program. When refugee women moved from the ESL program’s community of practice to new workplace-based communities of practices, all three refugee women became more legitimate in their new communities of practice over time. However, moving from one workplace-based community of practice to another workplace-based community of practice proved more difficult to achieve as the refugee women were less likely to attain legitimate membership in these new communities of practices.

In the study, Warriner (2010) found that although the refugee women expressed a desire to move to a different workplace-based community of practice in order to gain more success, their access to these new communities of practices was limited for socioeconomic reasons. There was a “continued lack of access to engaged participation in workplace communities of practices where the situated practices, learning opportunities, and identities fostered would facilitate a different, indeed better, membership in the ‘new work order’ of the global economy” (Warriner, 2010, p. 29). Although the study focused on the views of the learners, which were valuable to the

context of the study; however, considering the views of the workplace community of practice members could have situated the study more within the social learning perspective. The study contributed to the theory of situated learning because it examined the lived experiences and situated identities of minority groups.

O'Donnell and Tobbell (2007) looked at adult students' transitions to higher education within the context of communities of practice and legitimate peripheral participation. Three major themes emerged from the data: peripheral participation, academic practices and belonging. The adult students developed an awareness of their position of periphery with regards to higher education but not all experiences were necessarily positive. Accessibility to higher education services is an example of peripheral participation. In the study, the adult students spoke of some services that they did not have full access to, such as the library, student union and sports services – all of which contributed to the degree of peripheral participation that the adult students engaged in. Academic practices of higher education led the adult students to formulate beliefs that independent study was the key to their success. The entry-level courses that the adult students attended placed an emphasis on learning through active engagement. The adult students engaged in their studies within different contexts, which allowed them to explore and interpret different meaning systems. From this perspective, the adult students were able to develop their identities as higher education students, have a sense of belonging and engage in legitimate peripheral participation, regardless of positive or negative outcomes.

The authors found that the three key factors (peripheral participation, academic practices and belonging) all contributed to the legitimate peripheral participation of adult students in a higher education setting. It was apparent that there were “complex power relations” and “peripherality is a position from which an individual can move forwards toward fuller

participation [and one that] is an empowered position” (O’Donnell & Tobbell, 2007, p. 326). From a critical standpoint, the research design of the study needed to be modified in terms of data collection tools. Tools other than semi-structured interviews with the adult learners, such as interviews with professors and observation sessions, may have yielded more significant results. Additionally, it was difficult to ascertain whether the learners actually achieved legitimate peripheral participation when the majority of the learners (11 out of 17) had only just started their study period. The authors concluded that although legitimate peripheral participation had shown to be evident in the transition of adult students into higher education, there was a need for an understanding of the engagement practices of the higher education institutions themselves with respect to adult students and the barriers they faced.

Within the fields of adult learning and adult education, it is critical to move from an understanding of what adult students experience to one that focuses more on how and why they experience what they do (O’Donnell and Tobbell, 2007). Literacy learning within a community of practice requires practitioners to “give [learners] the tools they need to experience literacy differently” within social, cultural and historical contexts (Carter, 2006, p. 103). It is not known if communities of practices occur in literacy programs for deaf adults. However, the framework of communities of practice could contribute to a deeper understanding of adult deaf literacy within a situated learning perspective.

### **Deaf Literacy and English as a Second Language Literacy**

To understand how deaf adult learners develop their literacy skills, it is necessary to review what is known about deaf literacy. However, the subject of adult basic education programs for deaf adults has not garnered enough attention in scholarly journals and professional literature (Power & Leigh, 2000). Literacy levels have been linked to employment status and

educational attainment (Statistics Canada, 1996; Statistics Canada, 2005). As the literacy levels of deaf adults have been shown to lag considerably behind those of their hearing counterparts, there is a need for understanding as to why there is insufficient research on this subject.

Employment opportunities nowadays require higher levels of English literacy and numeracy than in the past and therefore, changing economies require more adept workers with acceptable literacy and numeracy skills (Levy & Murnane, 2004).

Achieving advanced levels of literacy have been a struggle for many deaf learners and numerous research studies have found that the median reading level for deaf high school graduates was equivalent to fourth grade reading level (Allen, 1994; Conrad, 1979; Dew, 1999; Gallaudet Research Institute, 1996; Holt, 1993; Holt, Traxler, & Allen, 1997; Paul, 1998b). Despite having low literacy skills, Holt (1993) found that for these learners, there was some improvement over time but the learners still did not perform adequately at age-appropriate levels for reading and writing. It is apparent that a fourth grade reading comprehension is far from what it means to be a functioning, productive member of society in light of recent economic times. Low literacy skills can limit educational, employment and recreational opportunities for adults (Kutner et al., 2007).

The language and literacy skills of deaf and hard of hearing individuals vary considerably, ranging from the primitive to the highly refined (Bochner & Bochner, 2009). English language acquisition for deaf people is extraordinary as they are typically categorized as L1.5 learners rather than first language (L1) or second language (L2) learners (Berent, 1996). The linguistic abilities of L1.5 learners fall between first and second language learners for English. Deaf 1.5 learners are unique because ASL uses the English language as the basis for communication. However, it should be noted that ASL and English are two separate, recognized

languages. For deaf people, their first language (L1) is their natural language, which is sign language, such as ASL. Sign language does not possess a written form and compared to hearing L2 learners, deaf learners tend to have limited knowledge of the phonological component of spoken language (Bochner & Bochner, 2009). Therefore, English language learning for deaf people must be naturalistic and contextualized within language learning principles (Enns, 2009).

A literature review conducted by Quigley and Paul (1994) determined that difficulties in literacy for deaf learners were attributed to limited vocabularies, delays in English syntax acquisition and poor comprehension of syntactic rules that are not part of standard English. Compared to hearing people who are L2 learners, deaf people must take extra steps to conduct additional translation when learning English whereas hearing people can learn English through written forms and speech concurrently (Livingston, 1997). Drawing upon Quigley and Paul's (1994) findings, there have been extensive discussions in the literature about the use of American Sign Language (ASL)-English bilingual/bicultural programs to support the development of literacy for deaf learners. It should be noted that the majority of the literature on ASL-English bilingual/bicultural programs is geared towards deaf children and adolescents and not deaf adults. Researchers and educators alike have advocated for the establishment of ASL/English bilingual/bicultural programs or English as a Second Language (ESL) programs (Paul, 1998a; Paul & Quigley, 1994; Strong, 1988).

In the bilingual/bicultural model, deaf learners have an opportunity to learn ASL as a first language and English as a second language (Enns, 2009). The model also emphasizes the importance of recognizing that ASL and English are completely separate languages and in no way should be considered to be alike for their linguistic properties, syntax rules and grammatical structures are different. ASL is indigenous to the United States and parts of Canada and it is not a

derivative or simplified version of English (Wilcox & Wilcox, 2003). ASL is considered to be a visual-gestural language whereas English is an auditory-articulatory language (Paul, 1998a). It has been suggested that the English language might be easier to acquire as a second language if learners are allowed to use it in conjunction with ASL (Paul, 1998a). Many deaf individuals learn ASL before English and it is only natural that ASL is established as a means of communication in the teaching of English literacy skills (Wilbur, 2000). A bilingual approach to language learning is beneficial because it “incorporates the features of natural language, interaction and social context within the classrooms” and involves “viewing deaf people from a cultural perspective” (Enns, 2009, p. 5).

Literacy learning for deaf learners who are proficient in ASL but not English can be understood by using Cummins’ (1984) ‘common underlying proficiency’ model, which is based around the principles of second language acquisition and proficiency. In the model, the two language systems are inherently linked together and both languages operate through a central core. Proficiency of both languages is not limited to vocabulary or syntax but rather is limited at a deeper, conceptual level (Cummins, 1984; Evans, 2004). In other words, Cummins theorized that when both languages are used by a deaf learner, the cognitive and academic abilities of the learner are positively affected. The use of Cummins’ model has been influential in deaf studies pertaining to ASL/English bilingual programs (Evans, 2004; Paul, 1998a). A study by Strong and Prinz (1997) showed that there was a relationship between ASL and English literacy, in which a higher degree of difficulty in ASL led to better English acquisition and that English literacy ability increased the proficiency of ASL as well. However, the study was conducted on deaf adolescents aged 8-15 years only.

A similar study by Bailes (2001) examined the lived experiences of teachers of deaf children in relation to an ASL/English bilingual/bicultural model. The author found that the use of ASL in the educational setting provided ease of communication between the teachers and students. Furthermore, ASL as a language was integral to the development of English as a written language for the deaf children. The teachers were able to seamlessly integrate ASL and English into various contexts while teaching the deaf children how to use and control each language in these contexts. The relevance of Bailes' (2001) findings for this study was somewhat limited in that it focused solely on deaf elementary school children. However, the findings were still valuable to the field of adult deaf literacy because the study addressed a gap in the literature: the integration of real world concepts and world knowledge within the teaching and learning curriculums. Furthermore, the study built on Cummin's (1984) common underlying proficiency model. Literacy acquisition can be a challenge for many deaf adult learners because learning a language is far more difficult in adolescent and adult years compared to early childhood and childhood years (Banikowski & Mehring, 1999; Jensen, 1998).

In 2003, *Goal: Ontario Literacy for Deaf People (GOLD)*, now known as *Deaf Literacy Initiative*, published a report describing the current workforce literacy activities as demonstrated in Deaf LBS programs. The LBS program is funded by the Ontario MTCU and provides services to adult learners who wish to upgrade their literacy skills at no cost. LBS programs are primarily learner-centred and the training plans for the learners are individually designed to include both long-term and short-term learning goals (Deaf Literacy Initiative, 2003). A total of 14 Deaf LBS practitioners were interviewed to provide input on current workforce activities, their use of workforce resources, the flexibility of programming, the goal setting practices, the challenges they encountered and their general attitudes towards workforce literacy. Feedback and

collaboration from Deaf LBS practitioners showed that Deaf LBS programs were flexible and adapted to best meet the needs of the learners. Integration of everyday living and real-world applications were provided as context for literacy learning. The practitioners felt that the development of future workforce literacy resources should be predominantly geared towards learners who were Levels 1 to 3, according to IALS levels. Furthermore, the practitioners felt that goal-setting could be an abstract concept for deaf learners entering the Deaf LBS program. Therefore, it was important to have the deaf learners spend a certain amount of time in the Deaf LBS program before goals could be identified as part of the learners' training plans.

Employment and independence were the two most common goal paths for deaf learners (Deaf Literacy Initiative, 2003). The practitioners felt that more importance should be placed on the development of workplace literacy resources which focuses on independence and employment. Although long-term goals were integrated into the training plans of the deaf learners, many practitioners felt that there was simply no time to incorporate long-term goal setting into their LBS classes. They felt it was more valuable to teach the deaf learners the basics of ASL, numeracy and English. The research study set out to examine the integration of workforce activities in Deaf LBS programs but the findings indicated that this practice was lacking. The practitioners commented that their instruction was focused on language learning and there was little emphasis on employment in literacy activities. When asked to comment on their learners' employability, the practitioners expressed doubts and concerns as "the road to employment is very long" for their learners (Deaf Literacy Initiative, 2003, p. 6).

The study took into account the views of the practitioners but there was little focus on the voices of the deaf learners themselves and whether workforce literacy may benefit them in the long-term outcome of literacy development. The use of learner self-assessment surveys could

have contributed to the findings of this study in determining whether learners were actually on the right goal-setting paths and whether workforce literacy resources were meeting the needs of the learners. The study's findings are applicable to adult deaf literacy because goal-setting is still seen as a new approach to realizing the literacy needs of adult deaf learners. More research is greatly needed to connect goal-setting with real world concepts within workforce literacy. The benefits of workforce literacy in Deaf LBS had yet to be thoroughly examined as demonstrated by the feedback from the Deaf LBS practitioners involved in the study.

A Canadian study by Enns (2009) examined effective teaching and learning strategies that facilitated adult deaf students' knowledge of ASL to support the development of their English literacy skills. The adult deaf students were part of a larger general adult high school upgrading program primarily geared towards hearing people. English literacy skills were taught using a bilingual/bicultural approach. The theoretical context of the study was grounded around the three levels of literacy (functional, cultural and critical) as proposed by Freire and Macedo (1987) as well as the four conditions that supports an effective learning environment (immersion, demonstration, engagement and expectations) as defined by Cambourne (1995). ASL was the language of instruction and the teaching of English was connected to the deaf students' life experiences and real world applications.

Enns (2009) found that many of the deaf adult students were able to achieve their goals of developing their English literacy skills. In addition, the deaf students experienced positive changes in their confidence and attitudes towards literacy. Many of the deaf adults became empowered learners as they "shifted from doing the assignments *for* the teacher, to making decisions about what they wanted to learn and how they could apply it to their lives in a meaningful way" (Enns, 2009, p. 15). Key factors that contributed to the literacy experiences of

the deaf students included the integration of the cultural view of deafness in the teaching of English, having ASL as a shared language of instruction, shared cultural experiences and a supportive environment for learning. Many of the deaf learners felt empowered as they progressed in the program, but it would have been beneficial to look at whether learner self-assessment surveys actually matched their performance scales. Enns (2009) discussed students improving their literacy skills on a functional level but this study has powerful contributions to the social theory of literacy, which was not mentioned. Learners had input in the choosing of learning activities and the use of a bilingual-bicultural model enriched their learning experiences. The findings of the study have implications for the field of adult deaf literacy in terms of program elements that benefit the literacy learning experiences of deaf and hard of hearing people. The study emphasized the need for more research on the effectiveness of bilingual approaches to educating deaf people in order to move from a functional perspective on literacy into cultural and critical perspectives of literacy.

For development of literacy skills, deaf learners rely on having ASL as the language of instruction, having access to visually-based information (pictures, signs, text), focusing more on conceptual translation versus literal translations and balancing the exposures to both ASL and English linguistic properties (Evans, 2000; 2004). A study by Evans (2004), which built on Cummins' (1984) 'common underlying proficiency' model, demonstrated that deaf learners need to be active learners and partake in activities that are meaning-guided rather than task-based. According to the Evans (2004), if this approach is taken in a deaf literacy classroom, the knowledge is not based on rote memory, but rather, it becomes internalized.

Similarly, an Ontario-based study by Musselman and Szanto (1998) found that literacy programs for deaf learners need to have meaning and purpose which can capitalize on the

learners' strengths and at the same time, address their weaknesses and working towards improving them. The relevance of the findings for this study's purpose is somewhat limited due to differences in age demographics in which the authors' study focused mainly on adolescents whereas this research study focused on adults aged 18 and over. It is clear that there should be a focus on how programs can create meaningful learning experiences in which literacy development can be cultivated in a way that learners can share with each other. We need to put aside the idea of *whether* we should provide a language-rich environment but *how* to provide that environment for deaf adult learners (Albertini, 2000).

### **Literacy for Deaf Learners Who Are Newcomers to Canada**

Much has been said in the literature about how literacy is a struggle for many deaf learners but there has been little discussion about deaf adult learners who are newcomers, immigrants or refugees (Anderson & Bowe, 2001). For the purpose of this research study, deaf adult learners who are newcomers to Canada, immigrants or refugees will simply be referred to as 'deaf newcomer adult learners'. This group of learners is considered to be a 'minority *within* a minority' and this poses unique challenges for researchers and the learners themselves. Newcomers to Canada are subjected to insurmountable challenges with regards to literacy, for they must learn and make use of the literacy practices of their new cultures (Currie & Cray, 2004). The IALSS found that 60 percent of immigrants scored below Level 3 in the prose literacy domain compared to 37 percent of Canadian-born adults (Statistics Canada, 2005). However, the IALSS does not consider whether the respondent has a disability. Adults with disabilities are more likely to be less literate than adults who do not have disabilities (Kapsalis, 1999; HRSDC, 2009; Macht, 2000). Statistics have shown that literacy is linked to employment, health care and level of education (Statistics Canada, 1996; Statistics Canada, 2005). If deaf

adults with low literacy skills are at risk for falling below the poverty line, what can be said of deaf newcomer adult learners? Deaf newcomer adult learners face even more challenges in their newfound cultures, in which they must cope with prejudice and ignorance (Doe, 1994; Rodda & Eleweke, 2002; Schirmer, 2000). Most deaf newcomer adult learners do not have adequate knowledge of English or ASL or let alone both, so how can these unique individuals meet the demands of a functionally literate society?

Research studies have shown that deaf newcomer adult learners encounter difficulties in accessing literacy services because of communication barriers (Anderson & Bowe, 2001; Rodda & Eleweke, 2002). Cultural beliefs and stereotypes regarding deaf immigrants play a role in the low rate of literacy service accessibility. The home cultures of deaf newcomer adult learners differ considerably in comparison to the dominant Deaf community as well as the hearing population (Rodda & Eleweke, 2002). It is clear that literacy programs for adult deaf learners should factor in the needs of deaf newcomer adult learners. A Canadian study by Rodda and Eleweke (2002) found that one of the major barriers faced by deaf newcomer adult learners was the quality of service delivery and furthermore, there was a lack of awareness of how to best address their specific needs. The study did not address specific accessible services such as literacy programs but they did highlight the importance of having specialized programs for deaf newcomer adults. Literacy practitioners need to be more culturally aware of these learners in terms of teaching, learning and community facilitation.

Novodvorski (2008) looked at effective teaching approaches and tools used in deaf literacy programs that included deaf immigrant adults in Canada. Using a multiple case study design, several themes emerged from the data: challenges for literacy programs, philosophies of teaching and their effectiveness, and effectiveness of bilingual/bicultural models. There were

challenges for literacy programs who served deaf immigrant adults. Diversity of the learners in terms of their cultural backgrounds, educational achievement and literacy profiles all had a profound impact on the literacy program itself. Learners varied in their linguistic, educational and communication abilities which created opportunities for literacy practitioners to utilize appropriate resources to best match the needs of the learners.

A key contributing factor to the success of the literacy programs was the use of a shared language, which was ASL, between practitioners and learners (Novodvorski, 2008). Practitioners built on the learners' knowledge of ASL which lent itself to the development of English literacy skills. The availability of ASL assessment tools posed a unique challenge to researchers and practitioners as ESL assessment tools were inadequate to identify language learning benchmarks for deaf adult immigrants. The study found that there were no standardized assessment tools to support the literacy development of deaf immigrant adults as these tools were primarily teacher-created and directed. According to Novodvorski (2008), there was a clear need to investigate the development and effectiveness of ASL assessment tools. A second emergent theme reflected the philosophies of teaching, beliefs and values of literacy practitioners for deaf immigrant adults. ASL as a shared language was essential to the implementation of an ASL/English bilingual/bicultural model. It was important for learners to gain empowerment through this model as well as awareness of the distinctions between ASL and English and their usages within social contexts. Finally, the study found that time constraints did not always permit practitioners to develop resources that worked in conjunction with the ASL/English bilingual/bicultural models in order to support the literacy development of deaf immigrants adults. There was a division between researchers and practitioners in the awareness of how ASL/English bilingual/bicultural models could be implemented in deaf literacy programs.

The study was limited in the notion that interviews were only conducted with the practitioners and not with the learners, which could have added another layer to the findings of the study. However, the author acknowledged that the views of the learners will be taken into account in the next phase of the study in which assessment and teaching tools will be piloted. From a critical standpoint, the flexibility of tools used in the study should be questioned as the author defined them to be 'text-based' and 'manipulative'. From other perspectives, tools can be contextual and applicable to real world concepts such as linking literacy to public transportation, health care and even nutrition. Therefore, the idea of tools should be less analytical and more about the experience itself. Novodvorski (2008) concluded that the theoretical and practical components of the ASL/English bilingual/bicultural model were consistent with the idea that literacy could be viewed as a social practice and that the model should be embraced, cultivated and embedded in deaf literacy programs.

A final report on a symposium was provided by Eaton (2008) which brought together researchers, practitioners, agencies and consultants to discuss current issues surrounding literacy for deaf immigrant adults. The attendees of the symposium came together as a cohesive group and identified key issues about literacy learning for deaf immigrant adults. According to Eaton (2008), there tend to be a stigma associated with deafness in ethnic communities, often one that is of shame or embarrassment. Deaf immigrant adults may not be familiar with the Deaf culture and efforts must be made to treat deaf immigrant adults as newcomers to Deaf communities and the values, norms and beliefs that are associated with such cultural groups. The development of partnerships between community organizations, immigration agencies, ethnocultural communities, families and public organizations can build awareness regarding different ways of providing services to deaf immigrant adults and their families. Lack of funding was identified as

a barrier to the provision of services to deaf immigrant adults. Increased funding for programs that supplement the literacy learning of deaf immigrant adults would bolster interest and program growth, which then may lead to additional funding. Participating in Canada's Language Instruction for Newcomers to Canada program (LINC) is a struggle for deaf immigrant adults because of the linguistic barriers. Deaf immigrant adults need ASL as the language of instruction and many LINC programs do not offer this option unless the LINC program is mediated through a deaf community agency or literacy organization. Furthermore, there is a need to build awareness on the issues of deaf immigrant literacy between all parties involved in order to foster partnerships to maximize services for deaf immigrant adults.

### **Summation of Literature Review**

The literature review looked at several research areas – adult literacy learning, communities of practices, deaf literacy and English as a Second language literacy as deaf literacy for newcomers to Canada – all of which contributed to the purpose of the study and its research questions. Examination of adult literacy learning through the three lens of literacy (functional literacy, critical literacy, literacy as a social practice) showed that literacy is unlimited in definition and can be shaped according to the context in which it is situated. Communities of practice situate learning within external domains in which all members participate freely through social interaction. Members negotiate identities as they move from one community of practice to another community of practice and it is in their transitions as learners that further contribute to the social theory of learning. Deaf communities are communities of practices and deaf literacy is a complex phenomenon. Literacy programs must take into account culturally-sensitive strategies with respect to the teaching and learning domains of these programs in order to achieve a better understanding of how low literacy levels for the deaf is to be improved. Deaf newcomer adult

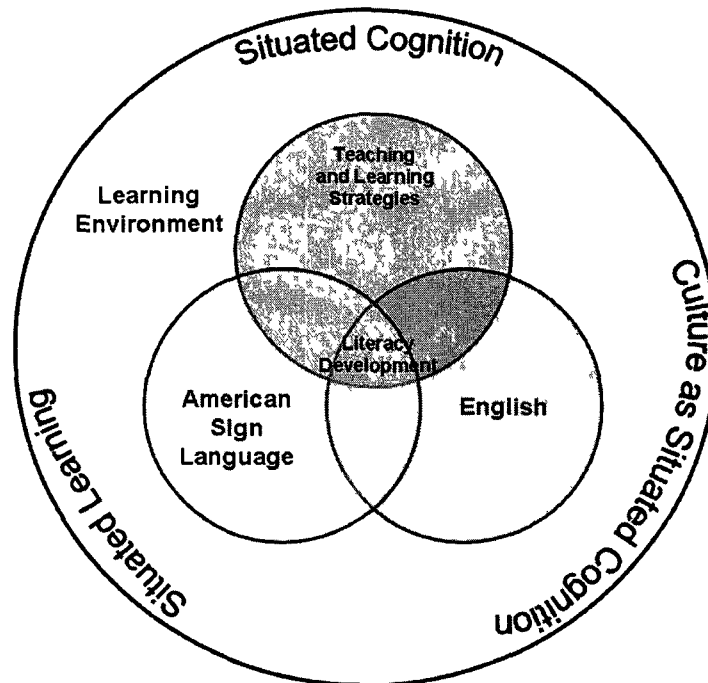
learners face even more significant barriers for they must adapt to new cultural, linguistic and social contexts. Issues that face deaf immigrant learners must be mediated through increased awareness and proliferation of literacy programs that provide these services to this minority group. In conclusion, an understanding of how these four areas of discussion can help explain how socio-cultural elements further contribute to the literacy learning experiences of deaf and hard of hearing learners enrolled in deaf literacy programs.

### **Conceptual Context**

This study was guided by a socio-cultural perspective surrounding the intricate realms of literacy and learning. The theories of situated cognition (Brown, Collins, & Duguid, 1989; Kirshner & Whitson, 1997) and situated learning (Lave & Wenger, 1991; Stein, 1998; Wenger, 1998, 2007) shaped the conceptual context of the study. Stein's (1998) work on situated learning with respect to adult education served as the overarching framework of how to examine literacy learning in a deaf adult literacy program. Stein's (1998) four elements of situated learning (content, context, community and participation), which will be described in greater detail later in this section of the thesis, helped shaped the observational procedures and interview questions and allowed for greater insight in how both situated cognition and situated learning create the dynamics of a deaf adult literacy program.

Moje and Luke (2009) noted that from a socio-cultural perspective, learning "involves people in participation, interaction, relationships, and context", all of which allow people to make meaning of their actions as well as the actions of others (p. 416). An interactionist socio-cultural approach provides the underlying groundwork to how both situated cognition and situated learning is examined within a deaf adult literacy program. According to John-Steiner, Panofsky and Smith (1994), an interactionist approach embraces the "central role of social

interaction in the development of language [or literacy skills]” (p. 3). Therefore, an interactionist approach can help encompass literacy learning for the deaf as a social practice rather than a functional, skills-based practice.



*Figure 1* Conceptual context of the study showing the development of literacy skills guided through a socio-cultural lens.

Figure 1 illustrates the conceptual context of the study, which is based on Cummins’ (1984) ‘common underlying proficiency’ framework. Cummins (1984) proposed that within a bilingual model, the two separate languages are interdependent but linked together by a common core, otherwise known as the common underlying proficiency. Therefore, “experience with either language can promote development of the proficiency underlying both languages” making possible for the transfer of literacy-related skills across both languages in addition to the cognition and academic skills (Cummins, 1984, p. 143). In Figure 1, as the deaf learner builds on his or her proficiency in English, his or her proficiency in ASL also increases. This is mediated

through the elements that encompass the theoretical frameworks of situated learning and communities of practice, which then leads to the overall development of literacy skills.

### **Situated Cognition**

A situated view of learning has been drawn upon in many avenues of educational research in recent times. The theory of situated cognition poses that knowledge can be drawn upon from the everyday activities of an individual in which they are situated (Brown, Collins & Duguid, 1989). Furthermore, “learning is inherently social in nature” (Hansman, 2001). In other words, learners are engaged with their environment and other learners in order to make meaning of what is being learned (Hansman, 2001). Situated cognition draws upon the work of Vygotsky (1978) who embraced the idea that social activities such as learning rely on the cultural elements of a group such as different levels of knowledge, interactions, relationships, shared values and beliefs, tools and symbol systems (Hansman, 2001; Vygotsky, 1978; Wertsch, del Rio & Alvarez, 1995). The fundamental idea of situated cognition is that there is a “shift of focus from the individual as the unit of analysis towards the socio-cultural setting in which activities are embedded” (Kirshner & Whitson, 1997, p. 5). In Figure 1, situated cognition plays a role in the conceptual context of the study. The learning environment and the cultural context of the environment may enable learners to reflect on their learning experiences through the learning activities that are part of the environment.

### **Culture as a Situated Cognition**

Recent studies that investigate the various contexts in which learning occurs have seen a gradual shift from what is learned to how learning occurs and in what way learning is used (Brown et al., 1989). Culture as a situated cognition is best exemplified by Wilson’s (1993) work regarding the contexts of learning in which cultural knowledge is not learned solely *from*

experience but *in* the experience itself. Using this approach has desirable implications for research and practice because it allows us to examine how culture is learned, how it may be taught, and how the voices of the learners are taken into context (Jacobson, 1996). Before culture can be considered to be inter-linked with situated cognition, it is important to define what culture is and how it can be interpreted in various contexts. Jacobson (1996) defines culture as a shared meaning system, in which “culture is first and foremost a shared way of making sense of experience based on a shared history” (p. 16). Both Taylor (1994) and Anderson (1994) define culture as being a framework for learners to make sense of their experiences and the learning itself is a new culture because the learners develop new strategies to create meaning of what is being learned.

Cognition is inherently social and can be seen as a cultural phenomenon that exists in the relationships between members of a cultural group in a defined setting (Wilson, 1993). The activities of these domains is framed by the culture itself and the meanings are socially constructed through the interactions of the members of the cultural group (Brown et al., 1989; Wilson, 1993). Practitioner knowledge and cultural knowledge are both situated in the context in which learning occurs and both cannot be defined by a system of rules (Brown et al., 1989; Jacobson, 1996). It is vital to develop teaching and learning strategies that encourage learners to use their cultural knowledge to derive meaning from what is being learned and how it can be applied in other contexts. Learning is essentially a process of enculturation and the use of culture as a situated cognition can prove to be valuable because of the way learning occurs and how culture plays a role within the learning experience (Brown et al., 1989). It would be interesting if Brown, Collins, and Duguid’s work could reveal how culture plays a vital role in the learning of deaf adults in literacy programs within a social context and whether there are strategies or tools

to facilitate that process. Culture as situated cognition is exemplified in Figure 1 because cultural values, norms and beliefs play an important role in deaf literacy programs. ASL is a primary example of the use of a cultural language to facilitate literacy development because it can draw upon the cultural knowledge of the learners who are part of the learning environment.

### **Situated Learning**

Situated learning differs from situated cognition in that the process of learning is situated in the domain in which it occurs rather than the internalized process through which it can occur. Lave and Wenger (1991) loosely define this particular domain as being the “legitimate peripheral participation” (p. 29) in which learners participate in communities of practice, which can lend itself to creating possibilities for learning. Situated learning allows learners to participate within a social world and embed themselves in cultural contexts in which meaning can be derived from their activities, tasks, functions and understandings (Lave & Wenger, 1991). It is important to consider the theoretical implications of situated learning. Lave and Wenger (1991) stress that “legitimate peripheral participation is not itself an education form, much less a pedagogical strategy or a teaching technique. It is an analytical viewpoint on learning, a way of understanding learning” (p. 40).

Situated learning can help distinguish between the ‘teaching curriculum’ that is taught in a classroom and ‘learning curriculum’ that is separate from the teaching curriculum. The “learning curriculum” consists of situated opportunities which can lead to the learning practice itself being re-defined from the perspectives of the learners (Lave & Wenger, 1991). On the other hand, the ‘teaching curriculum’ is merely a set of resources meant to instruct newcomers, which can limit opportunities for learners to have meaningful experiences (Lave & Wenger, 1991). This aspect of situated learning can give way for learners to develop communities of

practice through a socio-cultural perspective and lead to development of resources that are focused on the learners themselves. The idea of a community of practice was introduced by Wenger (1998, 2007) in which the members share a common goal in a particular domain of learning. Communities of practice can contribute to the field of deaf literacy for adults because of the Deaf community's natural social nature and kinship. In Figure 1, situated learning forms the third theoretical component of the research study in which the external participation among the learners can bring upon literacy development within the learning environment.

### **Situated Learning and Adult Education**

The complexities surrounding adult education can be explored thoroughly using Stein's (1998) examination of situated learning. According to Stein (1998), situated learning takes on the idea that "knowledge and skills are learned in the contexts that reflect how knowledge is obtained and applied in everyday situations" (p. 1). Within the realm of adult education and adult literacy, this approach can be extremely beneficial to the field of deaf literacy. Marschark and Wauters (2008) argued that deaf learners were strikingly different from their hearing counterparts in terms of their cognitive abilities and how it could translate to learning and the context in which it occurred. Active learning or meaning-making was one of the topics that Marschark and Wauters (2008) raised in their article, which was an integral component to a social learning environment. However, because deaf adults may vary in their linguistic background and abilities, it is important to not generalize teaching and learning strategies to a single group of learners. Bates (1976) suggested that "language is acquired and used in a social context" (p. 412) and this is especially true of deaf learners. For deaf learners, language is constructed within a socio-cultural context and this is where the theory of situated learning can be applied in an effective manner.

Stein's (1998) explanation of situated learning relies on four key components: content, context, community and participation. Content refers to the knowledge and materials of the program, the goals of the learner, the engagement practices and the life experiences – in which the meanings are negotiated by the learner. Context are the elemental factors that contribute to a learner's experience and it can "provide the setting for examining experience" (p. 3). More importantly, the learner is given the opportunity to engage with the norms, values and culture of a community. Community builds on the context and provides the content in which learners can use to socially engage with others. Participation involves active engagement with other individuals within a community to facilitate the transference, reflection, interpretation and negotiation of meanings.

Since learning may lead itself to becoming a social process, facilitators in adult deaf literacy programs can utilize unique strategies and tools that are best matched to deaf learners' cognitive abilities and apply them within a real-world context. The context in which situated learning occurs can build community and participation between the deaf learners. Through this, the voices of the learners themselves can be used to understand the nature of the content and how meaning is derived from it. Adult education from a situated learning perspective can be seen in Figure 1 as the third cornerstone in the conceptual context of the study. The four elements of situated learning – content, context, community and participation – are embedded within the literacy learning journeys of the learners themselves. When all four elements intersect with each other in the learning environment, literacy development is embraced within a socio-cultural perspective.

### **Chapter 3: Methodology**

The study was guided by a qualitative research methodology through a case study design. According to Hammersley and Atkinson (1995), qualitative research is based on the idea that “research design should be a reflective process operating through every stage of a project” (p. 24). A case study design was used to explore how the elements of a deaf literacy program contributed to the literacy learning experiences of deaf and hard of hearing adult learners. A case study is defined as “the study of an issue explored through one or more cases within a bounded system (e.g. a setting, a context)” (Creswell, 2007, p. 73). The case study design is appropriate when there is a need to understand complex social phenomena in real world settings from which meaning can be drawn (Merriam, 2001; Yin, 2009).

Case study research requires the researcher to investigate a social phenomenon within its real-life context. In most cases, the boundaries between the phenomena itself and the context is not clearly defined (Yin, 2009). A bounded system is considered to be one of the most important characteristics of case study research and does not necessarily limit itself to being the classroom or the setting in which learning occurs (Merriam, 2001). Therefore, the bounded system of a case study can extend to the learners themselves and how they make sense of their behaviour in a particular context. In this research study, the bounded system was the adult literacy program serving the deaf and hard of hearing community, the instructors and the learners who were part of the programs themselves. The content of the program was explored through Stein’s (1998) situated learning framework. This notion of situated learning was related to the learning environment and the learning activities that contributed to the overall experience of literacy learning for deaf and hard of hearing adults.

### **Confirmation of the Data Collection Site**

The Literacy and Basic Skills (LBS) program is funded by the Ontario Ministry of Training, Colleges and Universities (MTCU). The LBS program is primarily designed to help adult learners improve or update their literacy skills at no cost. The programs may also help learners qualify for post-secondary education or work on their employment skills training. The LBS program is divided into four streams: Anglophone, Francophone, Aboriginal and Deaf. Although there are over 300 LBS program sites across the province of Ontario, there are only 14 LBS programs that are aimed specifically towards adult learners that are deaf, hard of hearing or deaf-blind. My journey to confirm a data collection site started in my hometown of Ottawa, Ontario. I initially contacted the program director of an Eastern Ontario Deaf LBS program. I was invited to have a tour of the LBS program to be led by one of the instructors who was culturally Deaf. Unfortunately, before any connections could be made, the LBS program closed down due to insufficient funding. I was advised by the LBS program director to look elsewhere to conduct my research.

I next approached the program manager of another Deaf LBS program in southern Ontario. I received an immediate positive response to my request. The program manager then wanted me to have an official tour of the Deaf LBS program and discuss potential future research opportunities situated within the Deaf LBS program. During this visit, a verbal agreement was made for me to conduct my research at this Deaf LBS program. After a few further discussions, I then requested and obtained written permission to formally conduct research at the Deaf LBS program from the program manager.

## **The Participants**

There were a total of 32 participants involved in the study: three instructors and 29 learners were observed while participating in literacy learning activities. Of the 32 participants, six learners and two instructors were interviewed. All participants, including both the learners and instructors, were over the age of 18. The hearing status (D/deaf, hard of hearing, deafened or hearing) varied considerably among the participants. However, all participants were fluent in American Sign Language, which was the primary mode of communication at the Deaf LBS Program. Criteria for selection of the instructors to be part of this study were based on the recommendation of the program manager. Selection of the learners to become potential participants in this study was wholly dependent on whether they were students of the instructors who agreed to have their classes and modules observed. Three learners (Jill, Gina and Claude) volunteered to be interviewed and the remaining three learners (Timothy, Xavier and Marc) were personally asked by me if they would like to be interviewed. All names used in this thesis are pseudonyms to protect confidentiality. The three learners who were asked to be interviewed were chosen for several reasons: (a) they were familiar learners in the classes that were observed; (b) they contributed to the diverse background of the learners who are enrolled in the Deaf LBS program; and (c) they were active contributors in the Deaf LBS program classes and within the greater Deaf community.

The six learners who were interviewed attended the Deaf LBS program on a daily basis up to a maximum of 25 hours per week, which was dependent on whether they were full-time or part-time students. Most were unemployed and wished to seek out part-time or full-time employment in the near future. Of the 29 learners who participated, the majority had immigrated to Canada from countries where English was the official language; others had immigrated from

non-English speaking countries. The learner participants were English literacy learners below a high school level and were placed in one of the following streams: LBS 1 and LBS 2. The LBS program has five levels ranging from the lowest, LBS 1, to the highest, which is LBS 5. Learners at the LBS 1 level are able to read basic signs, understand visual information, tell time, add simple digits and fill out basic information on forms (OLC, 2009). Learners in the LBS 2 stream can read personal letters, write a cheque and write personal letters (OLC, 2009). LBS programs that focus on higher level learners (LBS 3 to LBS 5) enable learners to complete more advanced tasks such as reading news articles and books, filling out job applications, writing cover letters and essays, performing mathematical functions (multiplication and division) and constructing graphs (OLC, 2009). Learners who complete the LBS 5 level are ready to complete their Grade 10-12 high school credit or GED equivalent.

Some of the learner participants were enrolled in the Language Instruction for Newcomers to Canada (LINC) program which was also offered at the program site. LINC learners are permanent residents of Canada who can receive French or English language instruction at no cost if their first language is not an official language of Canada. Some of the Deaf LBS program's modules had overlapping of both the Deaf LBS and LINC learners. Profiles of the learners and instructors appear in the following chapter as part of the overall description of the case study.

### **Deaf LBS Modules and Classes**

The Deaf LBS program offered a number of core classes and modules to the deaf and hard of hearing learners who were enrolled in the program. The core classes were subject areas to be completed as part of the learner's program plan. English, Math and History were examples of core classes taught at the Deaf LBS program. Learners also had the opportunity to enrol in

various modules, which occur on session basis – meaning that learners only have a set amount of time to complete the module. Six modules and classes in the Deaf LBS program were observed and descriptions of these modules and classes are provided below.

**LBS 1 and LBS 2 classes.** The LBS 1 and LBS 2 classes were core English classes that were part of the learner's program plan. In the LBS 1 class, there were six learners (two females and four males) enrolled at the time of the study. Five learners (one female and four males) were in the LBS 2 class. Both classes were taught by Andrew, the instructor. Reading and writing were the primary literacy goals for the learners in these classes. During the observational period of the study, sentence structure, grammar rules and paragraph writing were some of the basic concepts that were taught to the learners. Many of the topics that revolved around the LBS 1 and LBS 2 classes during this observational period, such as nutrition and public transportation, were linked to real world concepts, which allowed learners to apply their knowledge in settings outside of the classroom.

**Quilting module.** The Quilting module had four learners (one female LINC learner, one male LINC learner, one male LBS learner and one female LBS learner) enrolled in this module with Heidi as the instructor. The module enabled learners to develop practical skills in addition to literacy and numeracy development. The learners chose the colours they liked and they received the quilt kits based on their preferences. Each learner received a package based on their chosen design, which included an instruction pamphlet and assorted fabrics to put the quilt together. The fabric pieces were not pre-cut and the learners were required to follow the instructions on the pamphlet in order to measure and cut out the correct sizes of fabric. In addition, the instruction pamphlet had step-by-step visual representations of how the quilt was to

be pieced together and learners were required to follow the precise pattern of the design. A list of sewing vocabulary was also included in the instruction pamphlet.

**WHMIS module.** WHMIS stands for Workplace Hazardous Materials Information System. The module focused on the provision of workplace safety information to the learners who were enrolled in the module. Six learners (one female and five males) were enrolled in this module and all of them had work placements in the same building that housed the Deaf LBS program. Example of work placements were cafeteria duty and janitorial services. Two teacher's assistants were available to help the learners understand the information that was being conveyed to them by Heidi, the instructor. Some of the learners had multiple disabilities such as being developmentally delayed or physically disabled. The WHMIS module allowed the learners to gain awareness of the hazards that surround their work placements, what safety precautions were required and how to assess and follow through on dangerous situations.

**Pre-Personal Support Worker (Pre-PSW) module.** The Pre-PSW module was an introductory course that was designed to provide learners with an overview of what it would take to complete an actual PSW program. There were only three learners (two females and one male) enrolled in this module, which was taught by Heidi. One of the female learners was in the LINC program. In this module, basic health sciences topics and concepts such as first aid, body parts and emergency situations were taught from a modified curriculum.

**Computers with Seniors module.** The Computers module was a popular module at the Deaf LBS program and the Computers with Seniors module used a modified teaching curriculum to best fit the needs of the learners, who were deaf senior citizens. Four learners (one male and three females) were enrolled in this module under the guidance of Heidi. The learners were learning how to operate a laptop (e.g. turning it on, shutting it down, using a mouse or a

touchpad) and basic word processing and spreadsheet skills with both Microsoft Word and Microsoft Excel.

### **Ethical Considerations**

First, procedural and ethics approval to conduct the research study was obtained from both the Deaf LBS Program and the University of Ottawa's Research Ethics Board for ethics approval of the research project. (Appendices A and B). The learners and instructors agreed to participate in the proposed research activities by signing a consent form, which fully summarized their roles in the research study and outlined their rights as participants (Appendices C and D). The reading levels of the learners in the Deaf LBS program were likely to be low and English may not necessarily be their first language. ASL was the primary language in the Deaf LBS program and the program manager felt it was important for the consent form to be interpreted in a way that was comfortable for the learners. Therefore, the consent form was interpreted from English to ASL by either the instructors or the program manager of the Deaf LBS program in the various classes that were to be observed by myself. The interpretation of the consent forms took a considerable amount of time as many of the learners had never signed a consent form before or had participated in a research study, let alone one at a Deaf LBS program. Therefore, many questions were asked by the learners which I answered. This allowed them to gain a better understanding of the research study's purposes as well as their roles as participants. Each participant signed two copies of the consent form: one for myself as a researcher and one to be given to the program manager of the Deaf LBS program for record purposes and safe-keeping.

Ethical guidelines were considered for the research practices undertaken in this research study. As I am profoundly deaf and do not have fluency in ASL, I required the services of both an ASL interpreter and a computerized notetaker. There is no governing body that controls the

practice and professionalism of interpreters within the province of Ontario. Therefore, contracts and confidentiality agreements were signed by all the interpreters who were involved in the study. The University of Ottawa's ACCESS Services provided full transcription services for all interviews that were conducted as part of this study.

### **Data Collection**

As this research study was qualitative and descriptive in nature, it was important to collect data using methodological approaches that were applicable to case study research design. Five sources of data were used in the research study: (1) observation of teaching and learning activities; (2) learner interviews; (3) instructor interviews; (4) document review; and (5) reflective journal.

**Observation of teaching and learning activities.** I spent two weeks observing literacy learning activities in the Deaf LBS program within a variety of classes and modules for an approximate total of 55 hours of on-site observation. Appendix E is the observation protocol based on the four defining elements of situated learning pertaining to adult education as proposed by Stein (1998). During the observation phase of the research study, some of the key points I focused on were: learner-learner interactions, instructor-learner interactions, the physical setting, the materials used in literacy activities, problem-solving strategies, interjection of real-world applications in literacy activities, the social environment and the ways in how learners and instructors use literacy within different contexts. My observation sessions and informal conversations revealed that there was no integration of deaf adult newcomer learners within the classes and modules. For example, the interactions between the learners revealed that they were a seamless group of literacy learners with no set boundaries or distinction with respect to ethnicity or gender. Instructors took care to ensure there was a sense of equality and respect among the

learners and therefore, there was no attempt to separate learners according to their educational and cultural backgrounds within the individual modules and classes. Consequently, in response to the secondary research question, “How are deaf newcomer adult learners integrated in Deaf Literacy and Basic Skills programs?” it was difficult to ascertain the differentiation strategies for deaf adult newcomer learners.

Throughout the observation period of the data collection phase of the research study, I found myself shifting back and forth between researcher-observer and observer-participant and this was dependent on the nature of the course or module being observed in the Deaf LBS program. The ‘observer as a participant’ meant that my role as a researcher was clearly made aware to the learners and instructors in the study (Johnson & Christensen, 2008). The desks in the classrooms were set up in purposeful arrangements, often U-shaped or L-shaped, which provided the learners with maximum facial contact with other learners as well as the instructors. It was important that I sit within the seating arrangement as it allowed my ASL interpreters to see the visual dialogue between the instructor and the learners and convey that information back to me.

The instructors were supportive of my role as a researcher and made every effort to accommodate my needs without disregarding the needs of the learners in the class. The learners had no objections to my presence or even the presence of my interpreters in the classroom. In the observation sessions, I tried to be unobtrusive as possible and I found myself to be clearly in view of the learners within the seating arrangement and all learners were able to see me observing the learning activities. I found myself participating in group sessions or in teaching activities on occasion but this role was somewhat limited. The learners knew that I was not only a researcher but also that I was a teacher. If the instructor was not available to help the learner

right away, the learner would often ask me for help with a learning activity. I sometimes talked to the learners while they were engaged in activities, or asked them questions in order to understand the context of what the learners were doing in terms of their literacy development. Sometimes as the instructors were teaching, they would ask me questions in front of the learners, such as asking me for a synonym of a problematic word. Both my roles as a research-observer and observer-participant varied considerably among the different classes and modules that I observed throughout the research study period at the Deaf LBS program.

Over a two week period, there were a total of 250 pages of observation notes and transcripts. Data analysis occurred simultaneously with the data collection phase of the study, as suggested by Merriam (2002). Throughout the research process, the observation transcripts and notes from the observation sessions went through a preliminary analysis to identify key questions, issues, themes or patterns that led themselves to the shaping of the interview questions to be asked of the learners and instructors later in the research study.

**Learner interviews.** The initial observation phase guided the development of the interview protocol to be used during the individual interviews with the learners of the Deaf LBS program. Six learners, four males and two females, were interviewed to explore how the integral elements of the Deaf LBS program contributed to their experiences as literacy learners. The semi-structured interviews were audio-taped and ranged from 25 minutes to 45 minutes in length. An ASL interpreter and a computer interpreter were both present during individual interviews with the learners in order to facilitate communication by all parties involved. The interview questions were structured around Stein's (1998) four elements of situated learning within an adult education context: content, context, community and participation (Appendix F).

Following the completion of the learner interviews, the audio tapes were transcribed. I went through each interview transcript twice and created a narrative form of each interview transcript to reflect each individual learner's experience as a literacy learner in the Deaf LBS program. In response to one of the research study's secondary research questions "How are deaf newcomer adult learners integrated in Deaf Literacy and Basic Skills programs?" the interviews with the learners yielded no supporting data on the integration of deaf newcomer adult learners into the Deaf LBS program. To support this statement, the interviews with the learners revealed that they saw themselves as proud Deaf Canadians who were accepted into the Deaf LBS program regardless of their cultural backgrounds as well as their individual literacy learning needs. As part of the member-checking process, the interview narratives were returned to the program manager of the Deaf LBS program for sign language interpretation of the interview narrative documents. This was to ensure that the information and views provided by the learners in their individual interviews was representative of their overall experiences as literacy learners. However, the interview narratives for the learners were never returned so member checking could not be processed and completed.

**Instructor interviews.** Interviews of instructors followed the completion of learner interviews at the end of the on-site data collection phase of the research study. Two instructors, one male and one female, were interviewed as part of the study. One of the instructors was deaf and the other instructor was hearing; both instructors were full-time employees at the Deaf LBS program. The instructors were interviewed to explore how the elements of the Deaf LBS program shaped the literacy learning experiences of the deaf adult learners that are part of the program as well as their roles as instructors in the program itself. Additionally, the instructors provided their personal insight on what constitutes 'deaf literacy' and the issues that revolve

around this subject. The questions for the interview schedules for the instructors were shaped in part by the initial observation period and were guided by Stein's (1998) four elements of situated learning.

The semi-structured interviews were audio-taped and ranged in length from 35 to 45 minutes. Refer to Appendix G for an instructor interview guide. The audio tapes from the instructor interviews were transcribed and converted into narratives which contained key quotations about the roles of instructors in the Deaf LBS program as well as the views of instructors regarding deaf literacy. In the interviews with the instructors, they were not able to give any information regarding how deaf adult newcomer learners were successfully integrated in the Deaf LBS program, despite constant probing. Therefore, the secondary research question "How are deaf newcomer adult learners integrated in Deaf Literacy and Basic Skills programs?" could not be addressed in this study. The interviews with the instructors revealed that learners were generally taught *together* regardless of their individual backgrounds. For example, an instructor discussed the challenges of teaching learners of with different literacy needs,

It is a challenge but you have to keep in mind, students that are at a lower level, you really have to expose them. A student at a lower level, I would never put them aside while I teach the higher level kids. I would never do that, I teach them all, and never exclude and people catch up.

Member-checking of the instructor interview narratives was attempted in which the narratives were sent to the program manager of the Deaf LBS program to be given to each instructor for verification of information. However, the instructor interview narratives were never returned so therefore there were no modifications to the original interview narratives.

**Document review.** Throughout my data collection period, I collected a variety of documents from the Deaf LBS program. The documents were obtained from both the instructors and learners with their permission. Review of these documents determined whether they contributed to the socio-cultural context of literacy learning in Deaf LBS programs. These documents included photographs of the classrooms and materials on walls, copies of schedules, copies of handouts and coursework used in literacy lessons, copies of students' actual work, Deaf LBS curricula and documents pertaining to the history of the Deaf LBS program. I experienced some difficulty obtaining a sufficient amount of documents pertaining to the elements that contributed to the ongoing learning in the Deaf LBS program. In many of the classes and modules that I observed, learners did not always have direct contact with paper documents (e.g. handouts, workbooks, worksheets) and some classes were more technologically-based (e.g. use of laptops, PowerPoint presentations).

Criteria for selection of documents for analysis were determined by: (a) the direct transference of a literacy concept or task in the form of text; (b) relevance of the document to the teaching/learning interaction; and (c) the interjection of the learner's personal experience or meaning-making strategies into text. The instructors contributed to the document review by selecting key documents and materials from their classes on the basis that they added value to my research study. An example of this was when one of the instructors provided me with photocopies of instruction booklets used by the learners on how to complete a quilt for the Sewing/Quilting Module. The instructor explained that the even though at first glance, the readability of the sewing instruction booklet appeared to be equivalent to a Grade 10-12 reading level, it did not deter the learners from using these booklets. The booklet contained visual representation of what patterns to follow in order to create the quilt, a checklist of the necessary

equipment, the specific measurements of the patterns and numbered step-by-step instructions. The sewing booklet contributed to the learners' literacy experience because it had both textual and visual information, which allowed the learners to make sense of what they were doing in the module.

Analysis of the documents collecting during the research study followed a similar path as the other data sources. I focused on looking for evidence that related to the four elements of situated learning that contributed to the literacy learning of deaf adults in the Deaf LBS programs. I read and re-read the documents, examined the pictures, made margin notes and highlighted emergent themes and patterns. Following this, the document analysis findings were triangulated with the findings from the analysis of the observation transcripts and field notes as well as interview data. Moreover, the analysis of the documents showed that there was no evidence to determine the answer to one of the secondary research questions in this study, "How are deaf newcomer adult learners integrated in Deaf Literacy and Basic Skills programs?" With the exception of the LINC program, the documents that were analyzed in the study did not have any mention of the roles of deaf newcomer adult learners with respect to their integration into the Deaf LBS program in addition to their individualized learning needs.

**Reflective journal.** Throughout the data collection phase of the research study, I kept a reflective journal where I recorded my personal thoughts and opinions with respect to the research process of the study. The reflective journal enabled me to have an opportunity to identify themes of a theoretical nature as well as in practical sense during the collection and analysis of data. A journal allowed me to recognize and reflect upon issues that emerged during the process of this research study. Lastly, I used the journal to reflect on my own experience as a

deaf individual. I was able to explore my own reflections about what it truly means to be deaf from a socio-cultural lens.

The Deaf LBS program was a vibrant and energetic environment and as a result of that, I had many informal discussions and conversations with both the learners and instructors. It was easy for me to develop a strong rapport with Deaf LBS community because of my own profound hearing loss. Although the primary mode of communication in the Deaf LBS program was ASL, it did not take me long to gain more fluency in the use of sign language in order to communicate with the members of the Deaf LBS community. All the members of the Deaf LBS community shared with me their rich stories, their backgrounds, and their feelings on how the program was structured and their own development as literacy learners or instructors. All these contributing factors allowed me to gain a deeper insight on the cultural context of the Deaf LBS program and how it was truly a community of practice. These stories were recorded in my reflective journal.

My judgment deriving from my journal entries and informal conversations with the people of the Deaf LBS itself is that it was more than a literacy program. The Deaf LBS program was a Deaf community in their own right without the distinction of immigrants and Canadians. It was a seamless family of literacy learners and practitioners and there were no set boundaries around membership within the community. In the Deaf LBS program, learners were not set apart from the other learners in the modules and classes that were offered by the program. Many of the learners immigrated from non-English speaking countries but within the context of the Deaf LBS program, they considered themselves to be proud deaf Canadians. The learners did not necessarily see themselves as newcomers to Canada but rather members of a richly cultural Deaf community. My judgment as a deaf researcher has led me to reconsider that the secondary research question, "How are deaf newcomer adult learners integrated in Deaf Literacy and Basic

Skills programs?” could not be answered based on the data collected for this study. Therefore, the decision was made to not address this particular secondary research question for this study.

### **Data Analysis Path**

Data collected during this research process was in the form of observation notes, observation transcriptions, interview transcripts, notes from the document review and finally, my reflective journal. The analysis of data occurred simultaneously with the data collection phase of the study. This allowed current themes to be analyzed and emergent themes to be integrated into the later stages of the data collection and analysis periods. This was based on Stake’s (2006) conclusion that themes were integral to the investigation of case studies because they may help guide the researcher in the data analysis phase. Furthermore, data analysis for this research study followed Creswell’s (2007) procedures as outlined for case studies, which can be seen in Appendix H.

### **Trustworthiness**

To ascertain the trustworthiness of this study, all data sources – observation notes, observation transcriptions, interview transcripts, notes from the document review and the reflective journal – were triangulated. According to Stake (2006), triangulation is a process in which multiple perspectives are used to make meaning out of the data as well as verifying the repeatability of an observation or interpretation. Since five data sources were used in this research study (observation, instructor interviews, learner interviews, document review and reflective journal), emergent themes or patterns from one data source were verified with other data sources. In addition to triangulation, member checking was part of the trustworthiness process, in which several attempts were made for the instructors and students to review their interview narratives and confirm the interpretation and accuracy of the data. However, member

checking could not be fully completed as the interview narratives for both the instructors and learners were never returned. If the interview narratives had been verified for their accuracy by the participants, the findings and interpretations of the research study could have been more reliable and credible.

#### **Chapter 4: Findings and Interpretations**

This research study looked at how the defining elements of a Deaf LBS program shaped the literacy learning experiences of deaf and hard of hearing Canadian adults within the different modules and classes offered by the Deaf LBS program. The four elements of situated learning – content, context, community and participation – helped explain the intricacies of deaf literacy and provided insights on how the socio-cultural elements contributed to the success of the Deaf LBS program. To investigate and interpret the dynamics of deaf literacy, a vignette of each module and class offered by the Deaf LBS program were presented as sub-sections to this chapter. The vignettes that were presented in this chapter could be seen as italicized single-spaced sections to denote that they were excerpts from observation notes and observation transcripts. Within each vignette, the four elements of situated learning were explored to explain the nature of literacy learning that occurred in the Deaf LBS program. The underlying socio-cultural themes that emerged from the situated learning framework were provided at the end of this chapter. Data from the reflective journal provided support on the role and types of barriers in the literacy learning experiences of the learners and instructors in the Deaf LBS program. The interpretation of barriers and how they shaped literacy learning could be deduced from the analysis of data.

Before the presentation of the research study's findings and interpretations, it was important to provide a rich description of the case itself. This included an in-depth picture of the Deaf LBS program, the learners and the instructors who participated in the study. The roles of the learners and the instructors provided insight into how their participation within the different modules and classes shaped the overall literacy learning experiences of the deaf and hard of hearing learners that were part of the Deaf LBS program.

**Description of the Case**

The Deaf LBS program is located in the southern region of the province of Ontario. Funded by MTCU, the Deaf LBS program has offered literacy programs and services to deaf and hard of hearing adults living within the region. At the time of the research study, there were three full-time instructors and several part-time instructors employed by the Deaf LBS program in addition to the program manager. The number of learners enrolled at the Deaf LBS program varied considerably as there was a flux of in the number of learners entering and exiting the program. Prior to enrolling in the Deaf LBS program, the learners must go through the intake process in which they may voluntarily refer themselves to the Deaf LBS program or by the recommendation of other Deaf LBS programs in Ontario. Each Deaf LBS program in Ontario is unique as the context of the program may focus on certain skills such as employment/workforce literacy, academic upgrading or literacy for independent living. All Deaf LBS programs focus on important skills and practices related to literacy and numeracy.

After the intake form is filled out, the learner must complete one or more assessment tests in order for program staff to determine how his or her learning needs best match the context of the Deaf LBS program. If there is a match, the learner then signs a permission form and a contract. Assessment tests may focus on one or more skills such as reading, writing, numeracy, computers or ASL. He or she may receive funding for public transportation in order to get to and from the Deaf LBS program. The learner's level of commitment to the Deaf LBS program is determined by the program staff (instructors and program manager). A training plan is created by the program staff to take into account the learner's learning needs as well as short-term and/or long-term goals. Once the program staff has determined that the learner is ready to leave the Deaf LBS program, the learner will take both an exit assessment test and an interview. It may be

necessary for the program staff to do further referrals and follow-ups, which can be done three to six months after the learner's departure from the Deaf LBS program.

### **Profiles of Learners**

The following profiles of the eight deaf and hard of hearing learners who were interviewed reflect their personal experiences as deaf adult literacy learners in the Deaf LBS programs. A brief demographic background for each learner is provided accordingly. During the individual interviews, the learners shared with me their stories, their struggles, their literacy and personal goals, and most importantly of all, their insights on what it means to be a deaf learner.

**Jill.** Jill was 39 year old at the time of the research study. She was originally from Barbados, but has resided in Canada since 2003. She became deaf due to German measles and as a child, went to a school for the Deaf in Barbados. As an adult woman, she is a vibrant, sociable and caring individual who can always be found helping another deaf learner. Jill is enrolled as a full-time learner at the Deaf LBS program and is in the LBS 2 stream.

This is Jill's second tenure at the Deaf LBS program, the first time being in 1993, before moving to a different Deaf LBS program in southern Ontario. When Jill switched to the other Deaf LBS program, she found the commute to be too tedious for her. Now, she has returned to the original Deaf LBS program and she is happier because it is in her hometown and closer to her family. Jill comes to the Deaf LBS program every weekday to upgrade her English and Math skills. She has participated in several of the Deaf LBS program's modules. She is also interested in other subject areas and modules such as History, Cooking, Quilting and Pre-PSW. Jill hopes to obtain employment in the future as a chef in the food industry as she has a passion for cooking.

**Claude.** Claude is a 36 year old severely hard-of-hearing man who has a physical disability. He came to Canada in 1995 from Trinidad. Originally placed in the LINC program, Claude has moved up to the LBS 1 stream as a full-time student. Claude has been in the Deaf LBS program for six years now. Because of his disability, Claude must use a laptop to work on his literacy skills. He is a quiet, reserved man who can be painfully shy in certain situations, especially when he is asked by other learners to talk about his life experiences. It is inside the classroom that Claude comes out of his shell and his eyes can light up the room.

Claude is not employed due to his full-time status at the Deaf LBS program. His primary reason for staying in the Deaf LBS program is to achieve enough literacy skills to become more independent in life. Claude lives with his sister, who provides an incredible amount of support. In our interview, Claude had a hard time expressing his personal insights on his literacy learning journey in the Deaf LBS program. His answers were brief and very rarely self-explanatory in nature. However, in the observation sessions, Claude was an avid learner and showed a desire to participate in learning activities, which allowed him to build confidence as an adult learner, and more importantly, a deaf learner.

**Gina.** Gina was a 44 year old woman who recently re-joined the Deaf LBS program in the LBS 1 stream as a part-time learner after she became a Canadian citizen in 2009. She was born hearing but became deaf due to a high fever as a child. She was originally from Vietnam, first arriving in Canada in 1986. Gina first came to the Deaf LBS program in 1993 and only stayed for one year then later spent 12 years of working for a postage machine printing company. At the time of this study, she is still employed by the printing company and often works odd hours. She is a small woman with a friendly smile. Gina takes learning very seriously and has a formalistic way of approaching her class work.

Since re-joining the program, Gina has been working to upgrade her English literacy skills. She can read and write English to some extent but wants to further her skills for use in the home and workforce. As Gina is a part-time student, she comes to the Deaf LBS program only for the morning sessions. During our interview, Gina expressed her feelings in which she wished she could spend more time at the Deaf LBS program, especially in the afternoon when she has to go to her place of employment. Her ultimate goal was to improve her English to the point where she could use it successfully in her workplace. Gina said that re-joining the Deaf LBS program was the right choice because she has seen her literacy skills improve, especially with her English.

**Timothy.** Timothy is a new addition to the Deaf LBS program, for he moved up from the LINC program in the fall of 2009 and is currently in the LBS 2 stream. He came to Canada as a refugee from Turkey in 1986 at the age of 27 years old and worked for many years in blue-collar jobs. Timothy is now a citizen of Canada. Timothy became severely hard of hearing at the age of two due to a high fever but wears a single hearing aid in one ear. He is a bright, respectful and intelligent man with many life stories and experiences to share among the people of the Deaf LBS program. He considered himself to be an older learner compared to the other learners in the Deaf LBS program but it has not stopped him from attending the classes every day.

In our interview, Timothy shared many stories and personal experiences about his life in Turkey, moving to Canada and experiencing a cultural barrier and how he overcame the challenges that faced him along the way. Growing up in Turkey, Timothy aspired to go to university in mainland Europe. Timothy spoke of his father's disapproval regarding Timothy's goals of higher education. His father wished for Timothy to stay in Turkey, one day to take over the family's business, which was a shoe store. Timothy chose to not go against his father's wishes. Turmoil in Turkey led Timothy to Canada, where he claimed refugee status. When he

arrived in Canada, the monthly government funding was insufficient for Timothy and his family to live on. Timothy had no other family in his new Canadian city and he relied on other Turkish hearing immigrants to help him obtain employment in order to support his family. According to Timothy, higher education was not an option right away because government officials needed Timothy to focus on getting his Canadian citizenship and supporting his family.

Timothy signed with a passion during our interview and discussed the different subjects and modules that he was taking at the Deaf LBS program such as English, Math, Quilting and Cooking. His motivation to take Quilting and Cooking as modules on top of his core subject classes was because of his family. Timothy described his wife as hard-working, always on top of the cooking and sewing as well as child-minding. He wished to lessen his wife's workload by contributing more to the household as well as gain a little more independence so Timothy had decided that Quilting and Cooking would be ideal modules to add to his curriculum. Within the Deaf LBS program and future plans, his goals were to upgrade his literacy, numeracy and computer skills for personal reasons. Timothy is living on his pension plan so a return to the workforce is not in his plans at the moment.

**Xavier.** Xavier is a 24 year old Deaf male student enrolled as a full-time learner at the Deaf LBS program. Xavier is enrolled in the LBS 2 stream. He was born deaf to a hearing family. Xavier went to a school for the Deaf in Ontario and has been at the Deaf LBS program for a year and half. Originally from Sri Lanka, he came to Canada with his family at six years of age.

Xavier is an outgoing, bright and sociable. He has a great sense of humour and always brings liveliness to the classes and modules that he finds himself enrolled in. Although he can be perceived as a class clown, Xavier is a determined young man who understands the

importance of literacy skills in relation to the workforce. As a full-time learner, Xavier had been taking the core LBS classes and at the time of the study, he was enrolled in the Pre-PSW module. His goal was to upgrade his English literacy skills to become a residence counsellor at a provincial school for the Deaf in Ontario.

**Marc.** Marc is a Deaf man who arrived in Canada at the age of 18 in 2004 from India as an immigrant. He is now 24 years of age. Marc was married in the summer of 2009. His wife is Deaf also but remains in India until the immigration papers are processed. Marc hopes that his wife will be able to move to Canada in the fall of 2010 and start the LINC program at the same site of the Deaf LBS program. When Marc came to Canada, he originally started in the LINC program but since then, he had upgraded to the Deaf LBS program as a full-time learner after passing his citizenship test in 2008. He is currently in the LBS 2 stream. He is an outgoing, vibrant individual who can bring a smile to anyone's face. He can always be found laughing in classes. When Marc signs, he signs with a flurry of passion, showing that he is a highly expressive deaf individual.

In our interview, Marc was eager to share his stories and experiences to how he came to Canada from India and received his start as a learner at the Deaf LBS program. Marc had several goals he wished to attain, one of them being to learn general life skills for everyday living in addition to educational and employment purposes. His ultimate goal was to become a teacher's assistant for deaf students as teaching runs in Marc's family.

### **Profile of Instructors**

Out of three instructors who participated in the study, two were interviewed as part of this study. Both instructors were full-time employees of the Deaf LBS program. The roles of the instructors were integral to the running of the Deaf LBS program and they helped define the

elements that shaped the literacy learning pathways of the deaf adult learners who were part of the Deaf LBS program. Profiles of both instructors who were interviewed are provided in the following section.

**Andrew.** Andrew is a full-time Deaf instructor at the Deaf LBS program. He started out as a volunteer from 2004 until 2006, when a job position opened up in which he successfully interviewed for. Andrew teaches the core English classes for the LBS 1 and LBS 2 stream learners. As a Deaf instructor, Andrew identifies with the learning needs of the deaf learners who are part of his classes. His teaching approach is highly expressive and visually stimulating for the learners. During our interview, Andrew emphasized the importance of literacy for independent living and that literacy itself as a subject is limitless. His ultimate goal for the learners of the Deaf LBS program is to expose them to information pertaining to the real world and teach them independence.

**Heidi.** Heidi recently joined the staff of the Deaf LBS program as a full-time hearing instructor in October of 2009. Heidi was hired to teach the English classes as part of the LBS curriculum but has since focused on the modules as of November 2009. As a hearing person, Heidi was originally from Europe and had been teaching hearing students for nine years. When she joined the Deaf LBS program staff, her fluency in sign language was slower than those of the learners but she had picked up the language quite quickly. In her teaching philosophy, Heidi preferred to take a learner-centred approach. At the time of the research study, Heidi was teaching various module courses such as WHMIS, Quilting and Pre-PSW. She hoped that the learners will walk away motivated and feeling confident enough to continue learning.

### **Literacy Learning Settings**

In this section below, six diverse classes and modules that were part of the Deaf LBS program will each be examined using Stein's (1998) four elements of situated learning within adult education contexts: content, context, community and participation. The four elements of situated learning in adult education are directly related to Lave and Wenger (1991)'s work on situated learning. Both interpretations of situated learning were used to shape the findings in a meaningful way that revealed new ways of understandings of how literacy as a social practice occurred in the Deaf LBS program. A description of each element of situated learning will be provided below to help interpret the findings within the socio-cultural sphere in which the study is situated.

The *content* refers to the knowledge and materials that facilitate literacy learning in the learning setting. Knowledge comprises cognitive processes that can include personal reflections, critical thinking and negotiating with the daily transactions of life (Stein, 1998). Materials make up the physical resources and tools that are used in the learning setting. Examples of materials are teaching resources, student work, books, posters and print materials that are directly related to the learning experiences of the learners and the various applications that are created as a result of these experiences.

*Context* comprises the physical and non-physical elements that make up the learning setting. Physical elements include a descriptive account of the learning setting in how the room is set up and how the furnishings and resources shape the setting. According to Stein (1998), the non-physical elements of the learning setting are defined by the values, norms and cultures that the learners place on their learning as well as literacy as a practice.

Instructors and learners become members of a *community* when they are given the opportunity to engage in dialogue to make meaning of the practices that they are situated within (Stein, 1998). Communities of practice may be teacher-centred or learner-centred depending on the context of what is being learned. There are no disadvantages to communities of practices being teacher-centred because in both cases, members of the community “build relationships that enable them to learn from each other” (Wenger, 2007). Members share and value the same common goals and within the community, there is a clear purpose of how learning is to be achieved within the group. From a situated learning perspective, the understanding of a concept is negotiated by the learner and meaning can be derived from this process. Learning is a social practice and a community enables learners to apply their shared understandings in their practices. All of these elements are integral to the existence of a community of practice in a learning setting.

Participation emphasizes the “interchange of ideas, attempts at problem solving, and active engagement of learner with each other and with the materials of instructions” (Stein, 1998, p. 3). When learners are fully accepted into a community of practice, they become legitimate members of that particular community, an event that is referred to as *legitimate peripheral participation* (Lave & Wenger, 1991). Learners who fully engage in their practices may develop new identities according to the practices they utilize in meaningful ways. Newcomers are coached by oldtimers and on-going learning is supported by the other learners in the community. Participation looks at who is being helped and who is doing the helping. Learners reflect on their mistakes and discuss how they used problem-solving strategies. Lastly, participation is about how the tasks are meaningful to the learners and how active engagement facilitates their overall learning experiences in the setting.

A socio-cultural lens through the use of an interactionist approach was used to guide the context of the research study. For the purpose of this study, literacy was defined as a social practice rather than a functional, skills-based approach (Barton & Hamilton, 2000a). The six vignettes that were presented in the study provided a richly detailed account of the Deaf LBS program in how literacy learning is structured for deaf adult learners. The four elements of situated learning shaped the lived experiences of the learners and instructors who are integral components to the Deaf LBS program.

### **LBS 1 Classroom – Public Transportation Woes**

*There are six learners in Andrew's LBS 1 class, two females (Shivanti and Gina) and four males (Patrick, Claude, Gursanjat and Omar). Today's class will focus on public transportation and the issues surrounding this topic. Omar opens up the discussion by sharing a story with the rest of the learners in which he has encountered problems with the bus driver over paying the correct fare. Part of Andrew's teaching approach is to have learners come up with ideas of how to resolve issues. When Omar explains that the bus driver makes him pay more money than he should, Omar decided that the best way to start the resolution process was to type the information down in his Blackberry personal device. He will then use this information to process a complaint to the bus company.*

*Andrew says that what the bus driver did was incorrect. Andrew takes Omar's story and explains the outcome to the rest of the learners, "So what [Omar] did, he typed in the bus number. He looked at the bus, he wrote down the time and the number of the bus." The learners discuss who they should talk to when they experience a late bus. Gina says that they should let the bosses of the bus company know. Gursanjat comments that they should go to the public transportation company and find the right people, "Find someone higher up and if that doesn't work, go higher up. Get an interpreter and negotiate."*

*Andrew pulls out a newspaper article and tells the learner that the reason why they are all talking about the woes of public transportation is because of an article in the current issue of the newspaper. The news article refers to a debate about making a public transportation company an essential service in order to avoid strikes. The learners discuss about the other recent issues and scandals that have hit the public transportation company in question such as sleeping employees and fare hikes.*

*On the whiteboard, Andrew writes several questions down for the learners to respond in their journals. The questions revolve around whether the learners like the current status of public transportation and what actions they would take if they did not like it. Patrick is struggling with the context of the questions so Andrew uses Patrick's home country, Guyana, to help him understand the questions about public transportation. What are the things about Guyana that makes it special? Why is it special? Andrew connects the question about Guyana to the question about the public transportation.*

*Claude is typing his responses on a laptop provided by the Deaf LBS program. Andrew notices that Claude has typed a simple sentence in which he says that he does not like the public transportation. Andrew asks Claude to be more specific in answering the answers. Omar helps Claude out by paraphrasing Andrew's comment and at the same time, Omar gives Claude advice on what to type. Andrew takes the time to check Omar's work. "Omar, I'm looking at what you have written and I can see what you mean, but what you've written looks like you've written ASL," Andrew goes on further, "It makes sense in signing but when you write it you have to think about English and how it has parts we don't use. You have to translate it."*

*Both Andrew and Omar go over one of Omar's responses. Andrew tells Omar that he needs to think about who is involved. Who is doing what? "Are you talking about Gina?" He quizzes Omar. Omar tells that the sentence is not about Gina but that it is about himself and his own wife. "But it's not in your sentence," Andrew emphasizes, "Where do you put it? Where are you?" Omar realizes that the sentence does not contain himself as a participant at all and corrects his mistake to ensure that he is indeed involved. "Oh! I have to put me in the sentence!"*

**Content.** From a situated learning perspective, the content consisted of the knowledge and materials in the learning setting. In the LBS 1 learning setting, the knowledge referred to the English reading and writing skills, discussions on current issues (public transportation) and use of critical thinking in relation to the current issues. The materials were the tools and resources used to support on-going literacy learning in the LBS 1 learning setting. These materials included the student journals, Oxford Picture dictionaries, technological equipment (laptops, personal devices), newspapers, general vocabulary books, computer-printed documents and hand-printed documents. In this learning setting, the learners discussed issues pertaining to public transportation and wrote responses to Andrew's questions in their journals. Although the journal-writing may be considered a *skill* but it was more than a skill as it was a *practice* because the learners were connecting the idea of literacy to their own personal experiences. Andrew found that the use of a journal could be seen as a tool to connect the practice to the knowledge that was being applied. He also linked his answer to other topics that he had been teaching the learners about, such as nutrition, which will be discussed later in this section,

What I'll do is I'll teach them about everything that is going on, and then I'll tell them to write so they're getting the knowledge about what's going on. Then they're also increasing their writing skills [...] Critical thinking is also very important. I apply critical thinking to writing. For example, why is it important to eat healthy? And why? Emphasizing the *why* part of it. So that what the students learn they [...] can apply it to writing. What I've taught them about nutrition, they can now apply to their writing. And it also forces them to think. That's my job.

The lessons that followed the current lesson on public transportation focused on the maintenance of healthy life-styles, which were not included in the vignette. The learners gained awareness of the roles of sugar, saturated fats, cholesterol and sodium. Andrew integrated the use of actual food items with food labels (bottle of honey, canned soup, milk cartons) to have the learners get a visual representation of whether these food items were healthy or not. Therefore, the food labels from these food items provided the learners with content to be applied from one context to another. Andrew explained that the activities that are used in his LBS classes are chosen for specific reasons,

I'll usually use handouts so that they can write on that... to prove, to show me that they are understanding what I'm teaching. But if I'm teaching real-life situations, then I'll bring them outside. For example, in two weeks, we're going to be going to a store and they're going to show me what is good food, nutritious food, not good food, and then I want them to explain it. Like, why would something be nutritious as opposed to not nutritious? So actually

showing it to me. So I would actually write down the lesson. They would have a piece of paper that said, “You have to find five things that are nutritious”.

Therefore, the content of the LBS 1 learning setting focused on development of literacy skills and practices through the use of real world concepts such as public transportation and nutrition. The knowledge acquired by the learners can then be transferred to other literacy learning settings in which learners can build upon their knowledge base of what constitutes as literacy. The provision of content was facilitated through the use of real materials such as newspaper articles, actual food items and bus system maps. Students demonstrated their level of knowledge through the use of student journals in which students wrote about topics in relation to what was being taught in the classroom.

**Context.** The context of a learning setting is made up of the physical and non-physical elements that help shape the literacy learning experiences of the learners. The physical elements include a description of the classroom in terms of décor, furnishings, tools and resources. Each instructor in the Deaf LBS program had an assigned classroom. The classrooms were actually partitioned off sections of a much larger room in the basement of the Deaf LBS program site. The walls were movable partition walls which could be adjusted accordingly to the needs of the Deaf LBS program. The space was large and airy with industrial lighting brightening up the room. The floor was wooden and there were a few occasional windows situated high on one wall. The vignette on public transportation did not actually occur in Andrew’s classroom. Andrew’s class was temporarily moved to another instructor’s classroom for a day’s worth of classes. In the alternative classroom, there were eight school desks with space underneath for the learners to store their workbooks. Learners sat in ergonomic swivel chairs, which allowed them swivel around to see each other. A smartboard was attached to a permanent wall and a moveable

whiteboard is also present in the classroom. The instructor's desk was situated in the corner away from the learners. On the same wall as the smartboard, there were two posters showing the ASL finger-spelling alphabet.

Non-physical elements consist of the values, norms and culture that encompass the literacy learning experiences of the deaf learners. Unbeknownst to the learners, they engaged in a literacy practice in which they valued the ongoing learning. In the vignette about public transportation, the learners actively sought out issues they have encountered with public transportation, and with Andrew's help, they came up with resolutions. Dealing with everyday living topics such as public transportation enabled the learners to build on their social skills as they negotiated with their literacy practices in a meaningful way. This was demonstrated with the use of Omar's Blackberry personal device as he was able to type in the bus information to process a complaint to be put forward to the transportation company for resolution. Andrew emphasized the importance of connecting literacy with real world applications, or namely 'survival literacy', as he described further,

I think it's more about survival. It's something they can understand. I mean, it's important that they understand even just a little bit [...] So it's a lot about exposing them to what's going on out in the real world.

By connecting literacy as a practice to real world concepts, Andrew was able to ensure that the learners could value literacy in these contexts but within measurable and recognizable boundaries.

**Community.** It was evident that the LBS 1 classroom was more teacher-centred than learner-centred, with the instructor providing the context for each learning activity to the learners. However, the instructor ensured that there were opportunities for the classroom to

become more group-centred, such as the discussion on public transportation. The learning setting was similar to a traditional classroom where the teacher was front and center and the learners were seated at their desks within a particular seating arrangement. The learners relied on Andrew to provide them with guidance and the context for learning. This approach enabled the LBS 1 learning setting to be a community of practice. With Andrew's help, the learners were able to share their stories, experiences and personal insights on the learning activities that were part of the classroom. Some of the learners see Andrew as the authoritative person in the room and the person that all learners should refer to. According to Gina, the roles in the classrooms were clear, as she explained, "Andrew is *my teacher*. He *teaches us* English and sentence structure and he *does* various activities with *us*." It may be due to Gina's cultural and educational backgrounds that she expected the classroom learning to be formalistic and traditional in nature.

Another important element of a community of practice is the notion that members share the same learning goals and have a strong purpose for learning. While the learners recognized that they were in the classroom to *learn*, they may not necessarily recognize that *doing* can be *learning*. Gina continued to explain that within the classroom, she will not ask other learners for support because she felt that the teacher was the only person she should ask for help. Andrew had contradicting opinions in which he thought that having a learner taking on a leadership role in the classroom could be beneficial for the group. He felt that if there was a leader, then other learners could look up to that leader and feel more empowered and this may lead to more opportunities for participation. All the learners wanted to improve their English literacy skills but at a cognitive level, some of them have not recognized literacy as being a social practice.

The learners showed different ways of understanding with respect to literacy in the LBS 1 classroom. The most compelling example of this could be found in the vignette when Andrew

inspected Omar's work. The linguistic differences between ASL and English could be seen as a barrier for learners to overcome. The learners must turn off their 'ASL thinking center' and turn on their 'English thinking center' of their brains. Andrew continuously reminded the learners to think 'English' when they are working on their English work rather than ASL. It was clear that some of the learners struggled at this functional aspect of literacy. However, the learners demonstrated understanding when literacy became defined as a social practice, as evident in their discussion of how to overcome challenges when using public transportation. Therefore, there was a continuum of the level of comprehension that went on in the classroom and it was wholly dependent on how literacy was defined.

Learning was predominantly teacher-centred but this approach benefited the learners in a way that context became meaningful and the learners' stories became part of a shared repertoire. The learners had a clear purpose for learning which focused on the development of English literacy skills. However, the learners believed that they were in the classroom to learn *literacy skills* whereas the instructor was making attempts to have the learners focus on *literacy practices* as evident with the nutrition and public transportation topics. Moreover, the learners meaningfully *engaged* in their practices but at a subconscious level. All these elements led to the conclusion that the LBS 1 learning setting was a community of practice.

**Participation.** Within the situated learning framework, participation involves learners actively engaging with their practices and with each other. Identities as literacy learners are being continuously developed as learners reflect on their experiences. Newcomers and oldtimers support each other in literacy practices in which the tasks and activities become meaningful to the learners themselves. In the LBS 1 classroom, there was some evidence of participation that contributed to the literacy learning experience of the learners but not necessarily enough that

would lead to full legitimate peripheral participation. The roles of newcomers and oldtimers were not clearly established as all the learners found themselves to be of equitable status in the classroom. However, the learners provided support and guidance to each other in a friendly and casual manner. For example, Andrew wanted Claude to be more specific in his journal about his feelings on public transportation. Omar took the initiative to paraphrase Andrew's suggestion in a way that was clearer to Claude.

For participation to be meaningful in the learning setting, the learners needed to be engaged in tasks and activities that could lead them to new ways of seeing themselves. In other words, the learners began to construct their identities as deaf literacy learners as they reflected on their experiences in the Deaf LBS program. Gina saw herself as an adult student and described her literacy learning experience from a functional perspective. When asked to comment on her experience, Gina simply stated that it would take an additional two to three years to finish the program in which she will get her certificate. Therefore, for Gina, the Deaf LBS program is an opportunity for her to upgrade her skills and then move on to further avenues. Andrew expressed a desire to teach the learners confidence, self-esteem and knowledge on top of the literacy skills and practices seen in the classroom. He explained, "We just try to keep them here, like I said, a safe haven, and when they're ready and they're confident, then we'll send them out."

The tasks and activities that were part of the LBS 1 classroom were meaningful and contributed to the overall participation seen in the classroom. They were concrete, straightforward and directly related to what the learners already know or had some experience with. Andrew linked these tasks and activities and taught literacy in a way that it was considered to be *information* for the learners to retain and apply in other contexts. The LBS 1 classroom was composed of lower level learners so the learners participated as if they were *students* rather than

seeing themselves as *deaf literacy learners*. The learners relied on Andrew to assess their level of understanding in relation to topics that were taught in the classroom. Both Gina and Claude commented that they depended on Andrew to tell them if the work was correct or incorrect. Therefore, Andrew was seen both as the facilitator and the primary support system for all the learners who were part of the LBS 1 classroom.

The LBS 1 classroom showed inconsistent evidence of legitimate peripheral participation. Of the two LBS classes (LBS 1 and LBS 2), the LBS 1 class contained lower-level learners who may not possess enough experience to critically reflect on their literacy learning experiences and degree of participation. Although the learners engaged in meaningful tasks and activities that enabled them to participate as literacy learners, the learners did not necessarily see themselves as learners in a broader context but rather they saw themselves as adult students. In conclusion, there was little evidence of legitimate peripheral participation.

**Summary and interpretation of the LBS 1 classroom.** Literacy learning was achieved through the integration of real world topics and concepts in the LBS 1 learning setting. Although the primary goal of the learners was to upgrade their English literacy skills, learning also incorporated literacy practices that focused on real world concepts. At a functional level, the learners developed reading and writing skills by using journals. However, at the social level of literacy, the journal-writing became a literacy practice in which learners applied real world concepts to these basic skills. Therefore, the content – public transportation and nutrition – provided another pathway to further enrich the literacy learning experiences of the deaf learners.

The physical context of the LBS 1 classroom was similar to that of a traditional school classroom in which there was a predetermined seating arrangement for the learners and the instructors was front and center. For some of the learners, this physical set-up provided a sense

of familiarity as they may have been exposed to this set-up in their early years of education. Therefore, the learners may have expected the structure of the Deaf LBS classes to be similar to the traditional school classrooms seen in some schools today. The non-physical context reflected the values, norms and culture of the learners in the learning setting. The learners showed that they valued their learning because they actively discussed issues and topics that could be seen as literacy practices. The learners also discussed events that occurred outside of the Deaf LBS program setting which communicated the fact that they took the content of the LBS 1 learning setting and applied it in other contexts outside of the program.

The LBS 1 classroom was more teacher-centred than learner-centred as it was primarily the instructor who provided the structure and carried it out on a daily basis. In addition, the instructor facilitated group discussions and ensured that every learner was an active participant. There were inconsistent learning goals and objectives perceived by both the instructor and the learners. The learners shared similar goals and were aware that their primary goal was to upgrade their English literacy *skills*. The instructor shared the same objectives as the learners but he also intended to build on these skills and make them more apparent as practices, or ‘survival literacy’ as he duly stated. In the LBS 1 learning setting, the learners engaged with the learning content and appeared to make meaning of these practices. They valued the context and applied them in other domains of life. However, it remains to be said whether they can connect the literacy *skills* to the external literacy *practices* that they were engaged in. The LBS 1 classroom showed a disconnect between *learning for an objective* and *learning as doing*. However, a teacher-centred approach to learning provided learners with the opportunity to share their experiences with each other and make meaning of these experiences. This enabled the LBS 1 learning setting to become a small community of practice.

Participation is essential to further development of a community of practice. However, in the LBS 1 learning setting, there was little evidence of legitimate peripheral participation. Roles of newcomers and oldtimers were not established. There were clear acts of helping and support within the learners but it was truly the spirit of the Deaf LBS program that created a wholesome, supportive environment within the discrete learning settings. The learners shared similar goals to what they wished to get out of their learning experiences but they saw themselves as students rather as learners. Therefore, their participation was strictly limited to that of a traditional classroom where they must meet expectations before seeing themselves as potential success stories despite the fact that they engaged in meaningful tasks and activities.

### **LBS 2 Classroom – Diane is the Manager of the Adult Education Program**

*Five students are present for Andrew's LBS 2 class: Marc, Xavier, Alejandro, Kim-Lee and Beth. They have their writing notebooks laid out in front of them on their desks. Recently, the learners have been learning how to organize and write paragraphs. Andrew starts the class by writing on the whiteboard: 'Topic Sentence: Diane is the Manager of the Adult Education Program'. Beth is visually impaired and has trouble deciphering both the whiteboard and the ongoing sign language in the classroom. Alejandro sits next to Beth and acts as a deaf interpreter for her so Beth can see the sign language up close rather than at a distance.*

*Andrew asks the learners to think about reasons why they know that Diane is the manager of the program. As the learners offer their answers, Andrew writes down the good suggestions on the whiteboard in bullet points underneath the topic sentence (e.g. 'responsible for the program', 'approves or not of teacher's ideas', 'oversees students' attendance'). Sometimes, when the learners offer their suggestions, other learners praise them for coming up with good examples.*

*Kim-Lee is struggling with providing a new suggestion to support the topic sentence, in which he comments that Diane is the manager because it is "something about computers". Andrew wants Kim-Lee to express his answer more clearly and with correct sign language usage. As Kim-Lee tries to re-word his answer, Marc unintentionally interrupts the dialogue between Andrew and Kim-Lee by offering Andrew an answer of his own. Andrew takes immediate action and tells Marc, "Kim-Lee should go first, Marc. I call on him because you come forward with ideas, but I have to pull them out of Kim-Lee."*

*Kim-Lee looks tentatively at the whiteboard, taking notice of what has already been suggested. Using a slower pace of sign language than the other learners in the class, Kim-Lee provides an answer, "We want to learn here, and Diane gives information about learning so we can get future jobs." "That's a good point, she helps people look for future jobs." Andrew says, giving Kim-Lee positive feedback. Andrew then goes on to explain that the instructors in the*

*Deaf LBS program also help the learners look for jobs too so the class should work together to think about an answer that is more specific to Diane's role at the Deaf LBS program.*

*Andrew decides that there are enough suggestions for the learners to work with. The learners are then asked to compose a paragraph as to why Diane is the manager of the program using the suggestions on the whiteboard. Alejandro offers support to Beth by copying down the suggestions into her own notebook since she cannot see the board clearly – a gesture that Beth graciously thanks Alejandro for.*

*Kim-Lee is unsure about the definition of the word 'approves'. He asks Andrew what it means. Andrew provides Kim-Lee the sign for the word 'approve'. Marc is sitting next to Kim-Lee and sees the situation. Marc repeats the same sign for 'approve' to Kim-Lee. Kim-Lee is still struggling. Andrew takes the moment to act out a scene that would involve the word 'approve'. He asks Marc to help him out with the scene. "Marc, ask me [if you can] leave early." Andrew prompts Marc, in which Marc follows up by signing the question back to Andrew, who nods in response. Kim-Lee appears to have understood the definition of 'approve'.*

*At the end of class, Andrew takes the time to look at Marc's paragraph. "Marc, this is [supposed to be a paragraph] of writing, not one long, long, long sentence!" He points at Marc's work and says, "Remember the other example!" Marc examines his paragraph closely to see what Andrew was pointing at. "I could put commas," He signs to Andrew, who shakes his head in disagreement. "Oh! I know what you mean. I'll do it over again tomorrow."*

**Content.** Within the situated learning framework, the content comprised the knowledge and materials that were found in the learning setting. In the LBS 2 classroom, the knowledge consisted of the development of English literacy skills, the linkage of practical skills to real world concepts, critical thinking and reflection. The materials of the LBS 2 classroom were the same materials found in the LBS 1 classroom, which included student journals, general vocabulary books, Oxford picture dictionaries, computer-printed documents and hand-printed documents. Learners worked on the construction of paragraphs and the use of a real world concept (Diane being the program manager of the Deaf LBS program) was used to support the learners' progress. Learning how to writing a paragraph could be considered a *skill* but within the context of the LBS 2 classroom, it became more a *practice* because they were developing facts that they *knew* about Diane and put it together in a descriptive paragraph. The lessons that followed the vignette focused on sentence structures and nutrition, which were provided in a more in-depth manner compared to the LBS 1 classroom.

**Context.** Within the classroom, the physical elements referred to the furnishings, décor, tools and resources that contributed to the literacy learning experiences of the deaf learners. The vignette for the LBS 2 classroom took place in the same classroom as described in the LBS 1 vignette, therefore a full description of the physical context can be found in that section. Non-physical elements were the everyday values, norms and culture that the learners placed on their literacy learning experiences. Within the context of the classroom, it was difficult for both Marc and Xavier to place a particular value on what they learned. To both learners, the classroom was seen as a formal way of learning and therefore, *learning* is separate from *doing*. In other words, the idea of schooling intersecting with other domains of life was difficult according to these learners. Marc analyzed his own learning experience with respect to the LBS 2 classroom and he said, “What I do at school sort of stays at school but how I learn here is separate from what I do at home and how I learn there or what I’m doing with my friends and family.” Xavier shared the same sentiments as Marc as he considered the on-going learning in a classroom context to be separate from other domains in which learning could be considered a social practice. He said that he did not tend to apply what he learned in the classroom to outside contexts such as his home, his family life or even his social life,

On a broader scale, real world concepts were discussed with a passion inside the classroom and transformed into practices, however, it was still difficult for the learners to differentiate between *learning for* and *learning to do*. In his interview, Marc commented that he liked learning about nutrition and knowing the difference between nutritious food and not so nutritious food. Xavier recognized the importance of daily journal-writing and saw it as an opportunity to use it in his future desired career as a residence counsellor at a school for the deaf.

He connected the use of a journal to improve his literacy skills in order to be a resident counsellor,

[You need to have good writing skills] because you are definitely going to be a role model for other students at the school. They come to you for things like tutoring actually. They need to be improving their English so my English has to be up to par. I want to encourage them to do what I'm doing in my journal and express myself, talk about my events, my activities and they should be able to do that too so I need to be able to do that.

The learners were able to value learning when it was broken down into discrete tasks or concepts, such as the role of journaling or even topics such as nutrition. However, when classroom learning was seen on a greater continuum, it was harder for the learners to place a value on their experiences as they may not directly connect with certain topics and concepts.

**Community.** The LBS 2 learning setting showed evidence of being a small community of practice. A lesson on nutrition was interrupted with the presence of an employee of the Deaf LBS program to announce the birthday of another learner in the program. Immediately followed this, Andrew spoke to me about the atmosphere of the classes and the Deaf LBS program in general,

I wanted to welcome you, Meagan, to the unpredictable world of adult education. You think you might teach, but something pops up and you can't put it aside. It's a community vibe. There's education, but there's team support... community development [...] Some of the students who may not have family support, they come here for that. So we always want to recognize people's

birthdays because a lot of the learners don't have that support. Welcome to our family.

Although the LBS 2 classroom was largely teacher-centred, there were significant observable events in which it gravitated towards a learner-centred approach. For example, Beth relied on many of the learners to provide her with one-on-one teaching as she was visually impaired. She could not see Andrew's signing very clearly, although out of all the learners, she is placed the closest to Andrew. Therefore, other learners act as deaf interpreters to convey information to Beth that she needed in order to be part of the classroom. The 'deaf interpreter' did not sign Andrew's dialogue word for word, but rather in a way that made sense to Beth. In the vignette, Alejandro offered immense amounts of support to Beth and the rest of the learners take notice of this and follow in the same manner. In the LBS 2 classroom, where there was more ongoing critical thinking and reflection, learners often found themselves acting as teachers to other learners to explain brief and simple concepts.

All the learners shared similar learning goals and objectives. In the LBS 2 classroom, the learners aimed to improve their reading and writing skills with Andrew's help and focused on connecting these *skills* to real world *practices* (e.g. Deaf LBS program, nutrition). In the classroom, there were many discussions about these topics and the learners also worked on their critical thinking and communication skills in negotiating with these topics. In the LBS 2 classroom, it appeared that the group setting helped facilitate the learning activities that were utilized in the classroom. When learners share learning goals and objectives, there are opportunities for feedback and reflection. Marc emphasized the importance of group settings to engage in meaningful practices, tasks and activities. He said that group settings allowed learners to bounce ideas off each other and learners could receive feedback through this, "That's helping

you understand things, giving you a different perspective on something and it's a broader understanding that you get from working as a group."

Xavier also stressed the importance of groups being part of his experience in the classes. Xavier found that a group setting benefited him as a learner because of the teamwork and discussions that are involved with group work. He mentioned that it was vital to have other people's input, cooperation and support to be part of the learning process. Xavier summed up his experience with a profound statement that completely defined what the atmosphere in the LBS 2 classroom was like, "The cooperation... there's nothing you can't understand without some cooperative support." Therefore, the LBS 2 learning setting could be constituted as a community of practice.

**Participation.** Support and cooperation in the LBS 2 classroom created opportunities for learners to make meaning of their roles in the classroom. Beth realized how integral it was for other learners to provide her with interpretation services in the LBS 2 classroom. Alejandro was aware that had Beth not received sign language interpretation, she would not be able become a full participant in the small community of practice. In the vignette, there were several exchanges between Beth and Alejandro in which they continuously supported each other through the use of praise and positive feedback in the paragraph-writing activity.

The roles of newcomers and oldtimers were somewhat blurred within the context of the LBS 2 classroom. However, there were times when certain learners dominated the classroom through over-use of participation, thereby limiting opportunities for other learners to learn how to actively engage with the community. For example, Kim-Lee struggled with being the centre of attention, especially when Andrew called him to encourage his participation in the classroom. In the vignette, Andrew called onto Kim-Lee to see if he could engage with the context and Marc

interrupted the dialogue. Andrew saw this as an opportunity to remind Marc that a community relies on learners being cooperative, respectful and understanding of each other. By diffusing the situation, both Kim-Lee and Marc saw themselves in roles of oldtimers and newcomers with Kim-Lee being the newcomer and Marc being the oldtimer as Marc was more integrated within the community than Kim-Lee.

Marc recognized that deaf people, like himself, may struggle with literacy but it was what they chose to do in response to that that was more important. His goal was to be a teacher's assistant for deaf students and he talked about how he came to terms with his struggles,

I know that a lot of deaf people are missing the literacy component, like 'Subject, Verb, Object' and knowing how to identify that in a sentence and writing them in the right way [...] Teachers are already... you know, educated to that level. I don't have that education and that experience to be an actual teacher but I feel that I could be a very good teacher's assistant. I don't aspire to go to university [...] I don't think I have what it takes literacy-wise to understand all the big words, but I would like to go to college, so that's another possibility.

Within the context of the LBS 2 classroom and the overall experience at the Deaf LBS program, Xavier reflected on his feelings as a deaf literacy learner,

Being here has definitely increased my self esteem. It's given me the opportunity to see that I can do things [...] After 'graduation', I plan to just head out into the world and look for some work. It doesn't matter if I make mistakes or I don't get things the first time [...] I think I have perseverance now

and I know from being more confident that I can do it. And I think I owe it to this program.

The LBS 2 classroom created opportunities for the learners to make meaning of their literacy learning experiences through active participation. Negotiating with new literate identities can help unfold the socio-cultural elements of the Deaf LBS program.

**Summary and interpretation of the LBS 2 classroom.** The LBS 2 classroom was similar to the LBS 1 classroom in which there was focus on the development of literacy skills and practices in connection to real world concepts and topics. The difference between the two learning settings was that the LBS 2 classroom had a greater occurrence of critical thinking and personal reflection on these topics. The content focused on the development of writing skills through the use of paragraphs and journal-writing, which both can be considered literacy practices. The content reflected the instructor's ability to connect skills to practices, in which the learners practiced writing a paragraph about Diane, who was the program manager. Ordinary literacy programs taking a functional, skills-based approach may have had learners write a paragraph about Dick and Tom chasing a dog in a field. In the LBS 2 classroom, the learners connected to the practice because they were writing about someone they knew (Diane, the program manager) and they were able to critically reflect on the importance of Diane's role to the Deaf LBS program.

The physical context of the LBS 2 learning setting was similar to that of the LBS 1 learning setting as they were both held in the same classroom. Therefore, there was a pre-determined seating arrangement in which placed the instructor in front of the classroom. The learners appear to be used to having a traditional physical set-up of the classroom. The values, norms and culture seen in the LBS 2 classroom varied widely among the learners. Some learners

were able to recognize the importance of certain literacy activities and practices, such as journal-writing, as a potential contributing factor to their future lives. Other learners preferred to have a separation between learning in the classroom and learning that occurred outside the walls of the classrooms. For some learners, there was a separation between *learning for* and *learning to do*.

The LBS 2 classroom was largely teacher-centred although the instructor provided many opportunities for the learning to become learner-centred in which learners actively participated in discussions about topics pertaining to literacy practices. The teacher-centred approach contributed to the LBS 2 learning setting becoming a community of practice. The learners relied on the instructor to provide the learning context in which meaning could be derived in order for the learners to share their experiences with each other. Most of the learners appreciated the learning to be focused on real world applications, which allowed for group work to occur as the learners worked with each other and shared their own respective experiences. The learners engaged in meaningful practices, as seen in their discussion about how Diane contributed to the success of the Deaf LBS program, which added to the community vibe of the LBS 2 program. The goals of the learners were similar in which they wished to upgrade their literacy skills to pursue employment or higher education. However, there were still questions as to whether they could fully recognize the potential of connecting these goals to the practices they already engaged in the classroom. In conclusion, the LBS 2 learning setting could be clearly defined as a community of practice.

There was inconsistent evidence of legitimate peripheral participation within the LBS 2 learning setting. Newcomers and oldtimer roles were not clearly established although there were events of helping, guidance and support within the learners. In the LBS 2 classroom, the learners were beginning to see themselves in new ways by actively engaging in the literacy activities and

practices. These learners had yet to fully realize their potential as deaf literacy learners so it remains to be said whether they can fully appreciate the purpose of these activities in relation to their own personal goals.

### **Quilting Module – Finishing up the Quilts**

*Four learners are enrolled in this module: Jill, Timothy, Emilio and Fatima. Of the four learners, two (Emilio and Fatima) are LINC learners. All of them have been working hard on putting together their quilts using fabric sets from their pattern kits which were purchased by the program manager of the LBS program. The pattern kits also include instructions on how to create the quilts themselves. Heidi takes extra care to explain the connection between literacy and quilting, “At the beginning, they didn’t know how to read the diagrams, but over time, they learned. They had to know the difference between centimetre, inches and millimetres.”*

*There are only two sewing machines in the room, so the learners must take turns working on their quilts. Jill and Emilio are working with the machines. Fatima is sitting at a table going over her sewing vocabulary sheets and learning the new words. Her quilt appears to be completed. Timothy is also seated at the table touching up his quilt, waiting his turn to use the machine. Emilio gets up from the sewing machine and lets Timothy know that the sewing machine is free for use.*

*“Could you come and change the colour of the thread?” Timothy asks Fatima for help with the sewing machine. “I can go over [to the machine] now because Emilio is done, but I need the thread changed.” Without hesitation, Fatima happily obliges. She also demonstrates how to change the colour of the thread on the sewing machine so everyone can see what steps should be taken in this skill.*

*Timothy calls Heidi over and explains to her that he made incorrect measurements with some of the fabric pieces of his quilt. After talking with Heidi and referring to the instruction pamphlet, they come up with a resolution. Timothy arranges the fabric pieces, picking the ones to be sewed now and the ones to be sewed later. He signs to himself as a way of thinking out loud: “I’m going to set these two pieces aside, so I don’t get confused about which ones I’m sewing. I’ll do the two long ones first.”*

*Emilio and Timothy announce to the class that they are still encountering problems with their quilts, namely the seam allowance and the stitching of the quilt corners. Fatima takes charge and tells Timothy how to fix his quilt. She uses Emilio’s quilt to point out the problematic stitching to Timothy. Emilio wants to know how to run a seam on the sewing machine with a quilt that has pins in it. Jill asks Emilio to come to the sewing machine. “You can do it. Watch and see.” She tells Emilio and demonstrates how to work the sewing machine with a quilt that has pins in it.*

*Fatima notices that Jill’s quilt has numerous errors, namely with the alignment of the squares and the patterns that are part of the quilt. “See how the lines go this way on the pattern, but then they switch to horizontal.” Fatima turns the quilt around and shows Jill the specific mistakes. Heidi steps over to the two women and agrees with Fatima. “They’re all supposed to go in the same direction, the squares,” Heidi tells Jill. Jill is told to look carefully at the instruction pamphlet, specifically how the patterns are arranged because some of the fabrics have a direction in the pattern. “Which one matches this pattern in the diagram?” She asks Jill,*

*who responds correctly. The two of them work together to figure out the order and alignment of the patterned squares. Fatima also takes the time to help Jill and Heidi work out the arrangement of the quilt.*

*Heidi takes the time to explain to me that it is important for Jill to figure out why her quilt is sewn incorrectly. "Imagine [if] she didn't figure it out and then finished... then whoa! She'd have to take it apart!"*

**Content.** The learning content of the Quilting module was based on the knowledge and material resources, which were accessed and built upon according to the needs and real world experience of the deaf learners. The materials that guided the learning content were in the form of sewing equipment and supplies, pre-packaged pattern kits and instruction pamphlets. Knowledge referred to the engagement and development of literacy and numeracy practices in relation to quilting and sewing skills. The learners learned how to recognize, interpret and create patterns. They also acquired knowledge in measurement skills and how to distinguish between different measurement units. At the start of the module, many of the learners did not understand the concept of measurement in relation to quilting and sewing principles. Heidi explained that she used a hands-on approach that allowed the learners to see measurement for themselves rather than taking a theoretical approach where there was limited application to the learners.

At the start of the Quilting module, the learners worked on their numeracy and measurement skills by actively engaging in the learning process. Heidi talked about having the learners moving about the classroom and measuring different items such as the TV, the door and a book. Heidi shared a funny encounter in which the learners did not know how to differentiate between the different units on a ruler,

The rulers had inches and centimetres on either side. They didn't know the difference. They asked which is 'centimetres' [and] which is 'inches'. I left them to figure it out. They were trying to figure out which is bigger [and] which is smaller. Usually it will say 'cm' somewhere or 'in' if it's in inches. But [the

rulers] had the name of the company that made the ruler and they thought that was the name of the unit of measurement. Now the measurement is great, they have practice. They are happy because they can really understand it.

Heidi introduced the concept of patterns through the utilization of basic shapes such as squares, circles and triangles. In Heidi's module binder, where she kept all of her lesson plans, student work, resources and teaching aids, she showed me examples of the worksheets she provided to the learners, as well as completed student work. The learners cut out different shapes (in the right sizes) with coloured construction paper and glued these shapes onto the worksheets in their respective orders according to the pre-existing patterns which were already printed on the worksheet. The learners learned how to read instructions and apply these instructions in connection to practical skills. The instructions were not only limited to the acquisition of English literacy skills as the instructions contained visual representations of patterns and shapes and measurements in the form of numbers and measurement units. Learners had to identify the measurement units, decipher fractions, correctly measure and cut the correct fabric pieces, match the pattern to the visual representation shown on the instruction pamphlet and correctly put the quilt together according to the patterning shown on the instruction. The instruction pamphlet had complex language and used sewing vocabulary to explain the steps. The learners often found themselves using the sewing vocabulary from the instruction pamphlet to describe their quilts, explain problem-solving strategies or to assist other learners.

**Context.** Each session of the Quilting module lasts two weeks, with classes held biweekly. After the end of a session, there is a new session with new learners. At the time of the research study, the learners had recently completed their two weeks' session but did not finish their quilts on time. Therefore, the module was extended to another two weeks' time to

accommodate their needs and allow them to finish their quilts effectively. The Quilting classes were located in a classroom on the second floor of the building that houses the Deaf LBS program. The classroom may have previously been used for conference or meeting sessions as one wall is lined with many chairs stacked on top of each other. There were two long tables that the learners could sit at if they wished to work on their quilts by hand or on their vocabulary sheets. The tables faced the moveable whiteboard. Behind the whiteboard was a rarely-used blackboard. A TV and a Video Relay device were attached to another wall. A few desks were scattered around the room. One of the desks was used by Heidi to hold her teaching materials. The room was very hot and dry as evident from the large windows that allowed sunlight to stream into the classroom. Only two sewing machines were available for the learners to use despite the module having four learners enrolled in the current session. Thread, bobbins, stitch removers, scissors, pins, needles and various other sewing materials and tools were available for the learners to use on their quilts.

The values, norms and cultural components of situated learning contributed to the context of the Quilting module. The Quilting module was considered to be a new literacy practice for most of the learners. Only Fatima had prior experience with sewing and quilting but as a LINC learner, she was able to learn new vocabulary words (in English and ASL) pertaining to the module. Most important of all, Fatima was able to develop social skills by sharing her knowledge with the other learners. That was literacy in itself because Fatima was building on her communication skills as a deaf adult as ASL is the cornerstone that binds the Deaf community together. While the Quilting module had direct ties to literacy and numeracy acquisition, there was a sense of practicality and application to *what* was being learned and *why*. Timothy described his motivation for taking the Quilting module,

Well, my wife and I have been together a long time now and I am always asking her to sew things for me, to mend things for me and she is so busy. She cooks for us, she watches the kids and she does a lot of cleaning around the home. She works basically 24 hours a day. She's been in school and looking for a full time job but she's a really busy woman. So she'd complain when I'd ask her to mend my clothes and things. She'd say, "You should learn it yourself!" So I could do things more independently and do them for myself and not have to rely on her.

Timothy valued his new skill at Quilting as well as sewing. Learning to quilt and sew allowed Timothy to gain independence and self-esteem. Timothy explained that the Deaf LBS program benefited him because it was a highly active and social program. The classes were different from each other and learning was not limited to the classes themselves. The learners participated in social learning activities such as field trips and sporting events. "It's like a family here so that's the best part." He commented.

Jill was less specific in how she used her literacy skills and practices outside of the Deaf LBS program. She said that she will only sometimes use her new practices and skills at home, especially when she is doing her housework, cooking or computer work. Jill may not necessarily value the literacy practices and skills obtained in the Quilting module the same way as Timothy. Jill showed that she valued the *idea* of Quilting being offered as a module by the Deaf LBS program. Therefore, Jill has valued her *overall* literacy learning experience through the different modules she got to take as a learner in the Deaf LBS program. The intent of the Quilting module, along with the other modules offered in the Deaf LBS program was to make learning directly connected to the learners' everyday lives. Heidi commented on some of the benefits of the Deaf LBS program,

The [Deaf LBS] program now is trying to focus more on real-life skills. [...] We have to teach them kind of real practical skills, you know... how to write a resume, how to write a cover letter, because they don't know these things. That's why they are here, that's why we want to teach them that, so they're ready for their life for the future. Because who is going to teach them if not us?

Heidi also talked about wanting her students to gain literacy skills for reasons other than employment or related purposes. Confidence, self-esteem and perseverance were all personal traits that learners worked on as part of their learning experiences. The Quilting module had a clearly defined context that contributed to the literacy learning experiences of the learners who were enrolled in the module. Those who were open-minded and had clear learning goals found that the Quilting module provided them with new ways of learning, new ways of communicating and most importantly, new ways of valuing literacy.

**Community.** The Quilting module was more learner-centred than teacher-centred. In this module, Heidi's role as an instructor was diminished as the learners worked together to create their quilts. Fatima showed Timothy how to change a bobbin on the sewing machine. Jill demonstrated to Emilio how to run a pin-laden quilt through a sewing machine. Fatima also helped both Jill and Timothy recognize the errors in their quilts with respect to the patterning and alignment of fabric. Emilio was able to demonstrate to me how he fixed his quilt with the tools he was provided with.

The learners had strong goals and a clear understanding of what kind of learning was to be achieved in this module. The learners' primary goal was to create a completed quilt, which would be the end result of the module. Some of the goals were more for personal reasons rather than literacy development, such as Timothy taking the module to alleviate his wife's workload.

Fatima could be considered an accomplished sewer but it was apparent in addition to her primary goal, she wanted to develop her English literacy skills, as shown in the vignette with respect to the sewing vocabulary words. Emilio took the module because the program manager suggested trying a new skill to further his literacy development. Jill's motivations were vaguer as she simply saw the module as being a chapter of a book in her literacy learning experience. Each learner saw themselves as quilters and not necessarily literacy learners.

Heidi explained she identified the learning needs of the learners by asking them directly. Timothy wanted to do quilting because he had a sewing machine at home and he wanted to consider that as a future skill. In the Quilting module, the learners demonstrated different ways of coming to an understanding with regards to a task, concept or learning activity. The learners talked about how they put their quilts together, what tools they used for specific quilting methods, problem-solving strategies and made direct literacy connections to the materials and resources they were given in the module.

Timothy explained that when he understands a concept, it was usually accomplished through class interaction. Timothy felt that depending on the context, he will look to other learners for help in the classroom. Jill commented on her level of understanding and said that she knows when she understands something because the sign language is clear. She needs a visual representation of what is being communicated to her and sign language is the best strategy to facilitate this understanding. When the learners do not understand a concept in relation to their learning goals, frustration was the most common feeling they encountered. Jill described feeling anxious and frustrated when she finds herself asking for help more than once. Once she understands, she talked about feeling good. "It's like freedom." Jill said, linking her frustration to her struggles with mathematical concepts. Timothy connected his frustration to learning of the

English language and said, “English is *so* difficult for me, it’s such a headache [because] there are too many words. They’re limitless and it’s been really hard to master.”

Both Jill and Timothy agreed that in situations where they do not understand a concept, it was important to go to the instructor first and foremost. Jill explained that the instructors were integral to helping them understand new concepts and work through language barriers. She continued to explain, “They help us out by giving us keywords or showing us the English vocabulary for the concept. They teach us slowly to build our understanding with things.” Timothy’s biggest struggle is English and he added, “I can’t really read the newspaper and understand it. There are too many words I don’t know and so I’ll ask the instructor to help me understand that [particular] English sentence.” He attributed this struggle to being deaf,

I know it’s difficult for *all* deaf people because hearing people, even if it’s not their first language, they can come to a country that’s speaking English all around them. They can pick it up that much faster but a deaf person can’t. They don’t have access to hear that language being spoken so it takes a lot longer and I understand that.

The Quilting module showed all the integral elements that make up a community of practice. The instruction was learner-centred as learners were able to demonstrate and model sewing and quilting principles to each other. Heidi provided support to the learners in the development of their literacy and numeracy skills indirectly through coaching strategies. Within the quilting model, the learners’ primary goal was apparent as they had to complete their quilts within a set deadline. While the learning purpose was clearly made, some of the learners had other motivations and personal goals to completing the module in addition to the primary goal, such as Timothy wanting to learn how to use the sewing machine at home and learn how to be

more independent. The Quilting module could be perceived as a literacy practice itself as learners were able to develop practical skills they could apply in other domains of life. The learners were able to engage directly with the practice and some were able to assess the meaningfulness of the practice itself.

**Participation.** Within the Quilting module, there was evidence of legitimate peripheral participation, which fully contributed to the situated nature of literacy learning at the Deaf LBS program. As a learner becomes fully integrated in a community of practice, his or her literacy identity may change according to the learner's own willingness to learn. The social nature of the Quilting module created limitless opportunities for learners to engage and interact with each other in literacy practices. Timothy consistently referred to himself as an "older learner" but by enrolling in the Deaf LBS program and the Quilting module, he had been negotiating with his identity based on his new experiences in the Deaf LBS program. Timothy valued his participation in the Deaf LBS program and had started to make meaning of his experience. He described his experience,

*I really like being in school much better than the person I was when I was just staying at home. I had stopped working. You know there's so little opportunity to learn that way. And I was starting to feel somewhat ignorant and knew that I had to become more active and make myself learn more. So that while I'm at school now, I'm also meeting a group of friends and I can hang out with them on weekends. We can communicate about coming to school.*

In the Quilting module, it was evident that Fatima was the oldtimer and the other learners were the newcomers. Fatima had taken on the role of instructor and used her knowledge of sewing to train the other learners in basic skills such as removing stitches, changing the bobbin

on the sewing machine and modelling correct pattern-making. The other learners recognized Fatima's strengths and often relied on her help when it was necessary. Timothy relied on Fatima to help him change the bobbin on the sewing machine. Timothy added that he liked the Quilting model because he found that his learning became self-directed, "With the sewing, once you are familiar enough with the pattern or you know what the numbers on these patterns are telling you to do, then you can figure it out yourself." Timothy made it clear that as a legitimate member of the community of practice within the Quilting module, he will often go to Fatima for help but when he understands the practice, he will take initiative and do the practice on his own from there.

Jill was able to interchange her roles of newcomer and oldtimer depending on the context of what was being learned. In the Quilting module, she was able to identify herself as a newcomer and Fatima as an oldtimer. Jill explained that there are situations in other modules where she and Fatima could switch their roles. Jill provided an example from the Cooking module that she and Fatima took prior to the Quilting module, in which she helped Fatima learn how to cook as cooking was one of Jill's assets. Jill summarized the experience, "She doesn't know how to cook very well, so I can actually help her when it's time for cooking. We help each other that way [and] we take turns."

The learners were engaged in activities that were meaningful in nature and further contributed to their overall literacy development. It was within these activities that they received support and help from other learners. They worked together in a supportive, caring environment and provided positive feedback to each other. Heidi recognized that the on-going monitoring, modelling, demonstrating and personal feedback were all critical elements to the success of the

Quilting module. It was not a traditional literacy learning environment but these elements contributed to the learners becoming *literate* in the process.

Finally, for legitimate peripheral participation to be existent, the learners needed to have the ability to understand that making mistakes was part of the process and also part of their overall literacy learning experience. It was what they did with these mistakes and how they utilized their problem-solving strategies that were important. When Fatima helped Jill with her quilt, Jill was able to recognize that she made a mistake. The Quilting module could be considered a practical, learner-centred module. Traditional literacy was not the norm but rather literacy was seen as a social practice. Through the establishment of a community of practice and legitimate peripheral participation, the learners were beginning to see themselves in a new light.

Heidi noticed changes in how the learners perceived themselves and other learners in the Deaf LBS program. She said that she found that the students were starting to recognize that they had new skills and practices to utilize for personal or professional reasons. Heidi went on to say that many of the learners had never had formal education before so she was difficult to imagine the experience that they were going through by being at the Deaf LBS program. For the learners, it was a new way of finding themselves.

Timothy said that his motivations and goals for being in the Deaf LBS program differed from the other younger learners but he noticed that he was more active and more outgoing now that he had the opportunity to participate in the classes and modules offered by the Deaf LBS program. He wished that he could have gone for higher education when he was younger but said that at this point in his life, it was not a viable option as he is now older and retired. After integrating himself into the community of practice, Timothy had decided that he wants to keep upgrading his English skills along with other skills for personal reasons. Jill saw the modules and

the classes of the Deaf LBS program as a way to challenge herself as a deaf learner. She enjoyed the social aspect of the Deaf LBS program and found that it contributed to her literacy learning experience. She considered herself to be a work in progress as she knows that her mathematical skills were not up to par yet but had seen improvements since starting the Deaf LBS program.

**Summary and interpretation of Quilting module.** The Quilting module could clearly be seen as a new literacy practice. The initial purpose of the Quilting module was to have the learners learn a new skill in addition to literacy and numeracy development. However, the Quilting module transformed itself into an intricate community of practice that embodied the idea of literacy becoming a social practice. The main learning goal in the Quilting module was to have learners learn how to create a quilt through measurement principles, pattern-making, sewing concepts (principles and vocabulary) and use of sewing equipment. Numeracy, English literacy and visual literacy (e.g. pattern recognition) were all tied into practical skills to create a new literacy practice for many of the learners. Therefore, the content was directly tied to practical applications in which the learners could manipulate according to their needs.

Quilting classes were held in a classroom where it did not resemble a true learning environment that allowed for maximum exposure to sewing and quilting principles. There were only two sewing machines and limited supplies. Despite the lack of authenticity in its physical contexts, it did not deter the learners from achieving their learning goals and objectives. As there were more learners than sewing machines, the learners worked out a plan of action of who works on the sewing machines and for how long. The learners placed tremendous value on their learning experiences as some of them had exterior motives not necessarily limited to literacy development, such as family reasons. The context of the module, with its use of content, facilitated the module's direction into a true community of practice.

Learning in the Quilting module was fuelled by a learner-centred approach. The role of the instructor was reduced and the learners came to the forefront to provide the context for learning. The goals and objectives of the learners were very clear – they all desired to learn a practical skill that included literacy and numeracy – but the practical skill turned into a practice itself when the learners spoke of their motivations as to why they wanted to take the module. Engagement within the practice was meaningful and related to the learners' personal and professional goals. The Quilting module was a true community of practice in which there was a clear purpose for learning, it was learner-centred and they all engaged in their practice within meaningful ways.

When learners become integrated into a community of practice, they become legitimate members through participation within the practice. In the Quilting module, there was a high degree of legitimate peripheral participation. There were clearly defined roles of newcomers and oldtimers to create a helpful, supportive environment. This enabled learners to see themselves in new ways through their participation within the community. The learners worked through mistakes and overcame these struggles with the help of other learners and the instructor. The participation within the Quilting module can be seen as an engine that fuels the dynamics of the community of practice which further contributed itself to the success of the Deaf LBS program.

### **WHMIS Module – Danger Signs**

*The WHMIS module has six learners enrolled in the current session of the module – one female and five males: Bonnie, Arthur, Johan, Ian, Lewis and Christian. Bonnie, Arthur and Huang are sitting at one table. At the next table, Ian, Lewis and Christian are seated together. Some of the male learners are developmentally delayed in addition to their deafness. In this module, Heidi is the instructor and there are two teacher's assistants, both males, who help the learners remain focused and motivated.*

*Heidi decides to go over each letter in WHMIS and have a brief discussion about what the words (workplace, hazardous, materials, information, systems) mean and how they are related to the learners' work placements. When Heidi prompts learners to provide her with a definition, an example or a situation relating to the word, the learners often connect it to their*

*workplaces. The learners spend a significant amount of time talking about 'hazardous'. The weather on the day of this class as well as yesterday had been non-stop rain. Heidi points this out and tells everyone, "If it's stormy outside, it can be dangerous, right? Slippery [too]. And we use salt to counteract that." Johan motions to everyone to look at him as he describes an experience about using salt as part of his job and he explains, "Actually, I had to use salt to keep the entrance safe yesterday." The rest the class murmur in agreement.*

*Handouts on hazard symbols are distributed to the learners. Heidi introduces today's objective: practice identifying different symbols. "Have you seen any of these symbols before?" Heidi gestures to the hazard symbols on the handout. Some learners nod, some appear to be confused and some are unresponsive. Christian indicates that he has seen hazard symbols before, "Yes, I have definitely seen these before. I've seen them at work, in the kitchen. Fire for instance, indicates flammable. I recognize some of these symbols."*

*On the whiteboard, Heidi writes down 'Hazard' and 'Symbols'. Building off concepts from WHMIS, Heidi points out that 'hazardous' means something that is not safe and that it means 'danger'. Underneath 'Hazard' on the whiteboard, Heidi writes 'danger' to link together the two words. The learners understand that the two words essentially mean 'danger pictures' and begin to discuss different scenarios when they have come into contact with these pictures. Ian, who has been quiet for most of class, finally offers his opinion. "It's like when I use my cart, my trolley with cleaning supplies on it, and I need to know which supply, or material, can be flammable. That material needs to be kept away from another material on the cart. So I have to organize my things to be safe according to what the picture tells me."*

*Heidi praises Ian's explanation. Heidi stresses that it's important for the learners to understand the information because they have to stay safe. Ian agrees with Heidi. "Of course, I need to stay safe because if I accidentally spill something and I do nothing about it, it can cause danger to someone else, someone could trip on that. So there are things I can do to make that area safe," He continues to sign, "Put up my yellow sandwich board that says 'Slippery Floor'."*

*The learners begin to discuss their work placements with respect to safety issues. Bonnie talks about gas stoves in the kitchen where she works. Both Ian and Christian discuss the importance of masks to protect themselves against strong fumes. Arthur talks about how he is always watching his environment to make sure he is safe. Bonnie goes on to share an experience of being in the kitchen and things can get burnt, which then can lead to a fire, especially if there is oil involved. Ian tells Lewis that if people do not wear gloves when working with hazardous chemicals, the chemicals can corrode their skin. The learners continue their side conversations about their own work experiences till the end of class.*

**Content.** In the WHMIS module, the classroom setting consisted of the knowledge and materials that made up the content in which learning was situated. The knowledge was directly related to the learners' work placements at the Deaf LBS program. The knowledge content comprised workplace safety and hazard topics in which the learners needed in order to carry out their work placements in a safe manner. The instructional materials were connected to the teaching of WHMIS concepts and were be found in the form of MSDS booklets, computer-

printed worksheets, hand-printed worksheets and safety manuals. Heidi used materials that were not limited to worksheets to help her explain concepts related to WHMIS. For example, she photocopied print-outs of various WHMIS hazard symbols which are categorized according to their class (compressed gas, oxidizing material, flammable and combustible material). Heidi cut out the symbols and placed the cut-outs in blank envelopes. Each learner received an envelope containing the symbols and learned how to correctly identify and match the symbols to their textual forms. This allowed Heidi to provide the learners with easily manipulated content.

**Context.** The WHMIS module classes were held in the same classroom as the Quilting module, which were both located in a classroom on the second floor of the building that housed the Deaf LBS program. A description of the physical set-up of the module can be found in the Context section of the Quilting module. The learners seat themselves at the tables, facing Heidi with a view of the whiteboard behind her. Two teacher's assistants were involved in this module and were found seated at either end of the long table, supporting the learners with their learning needs.

Non-physical elements referred to the values, norms and culture of the on-going learning in the WHMIS module. All of the learners had work placements at the Deaf LBS program site though it was not directly within the Deaf LBS program. The Deaf LBS program was housed in a larger building where there was a cafeteria. Several of the learners had placements in the cafeteria kitchen, helping serve meals at mealtimes and some learners do janitorial services throughout the building. All the learners in the WHMIS module valued the development of their literacy skills and practices although they directly linked their literacy development to their work placements and not necessary for educational purposes.

The learners placed tremendous value on literacy as a *practice* rather than as a *skill*. They were able to share with each other their experiences on what practices they engaged in as part of their workplace and how literacy could be directly or indirectly related to these practices. Ian was able to demonstrate knowledge of WHMIS hazard symbols when he explained the organization of cleaning materials on his trolley. He said that in order for him to be safe at his workplace he had to keep flammable materials away from certain materials on the cart. Therefore, Ian valued the importance of literacy through the use of symbols and he connected these images to his own workplace. Ian also valued literacy for the safety of other people in his work placement. He talked about needing to understand information pertaining to safety in order to protect other people from getting hurt as seen in the vignette about using yellow sandwich boards to indicate the presence of slippery floors.

Ian and Christian both demonstrated critical thinking in what they should do when they find themselves in situations where there are unsafe fumes in their workplaces. Both learners agreed that they should be given masks to ensure their own protection and that of others in their workplaces. Bonnie linked the concept of fumes to smelling gas in the kitchen, where she worked as a chef's assistant. Safety procedures could be considered as literacy practices as the learners were developing new vocabulary and communication skills to be utilized in their workplaces.

The WHMIS module embodied a traditional model with respect to the literacy development of the learners. Although the teaching of the module was considered to be traditional, the module focused on the reflection of literacy as a practice rather than as a skill. There was a direct connection between what was being taught in the classroom and how it was being applied in the work placements of the learners. The learning content and context was

limited to WHMIS concepts and workplace issues. The physical set up of the classroom was non-traditional with diminished features of a traditional school classroom in addition to the layout of the tables and whiteboard. However, it was the non-physical elements that defined the context of the WHMIS module, in which it brought out the values that the learners placed on their literacy development within their work placements. The critical reflections, discussions and connections that the learners elaborated on were facilitated by the instructional approach of the instructor, which will be discussed further in the next section.

**Community.** In the WHMIS module, the instruction was primarily teacher-centred. The learners directly faced the instructors who used various teaching strategies to teach them concepts related to WHMIS and also their work placements. The teacher's assistants who were part of the module provided support to the learners and ensured that the learners remained focused on the instructor. Heidi said that she tried to make her classes learner-centred but sometimes it cannot always be the case and it really depended on the context of what was being taught. Heidi explained that the dynamics of this particular group was slower than the other classes and modules that she teaches. Some of the learners were developmentally delayed and most of them were considered to be older learners. Therefore, a teacher-centred approach was necessary as the learners relied on Heidi to provide guidance on how learning was to be shaped in the classroom. With Heidi's help, learners discussed workplace safety issues and shared their stories with each other. This enabled the module to be a community of practice as learners were building a shared repertoire through their similar experiences in their work placements.

A teacher-centred approach enabled Heidi to ask questions in a way that provided the learners with opportunities to reflect on their own work placements. An example of this was when Heidi commented that some of the learners in the class were currently working in the

kitchen and she specifically asked what products the learners used to protect themselves in that specific work setting. Bonnie, a kitchen worker, talked about oils and how she made sure that the stove area was safe. Bonnie's experience allowed the learners to talk about electric outlets and what to do if the oil catches fire in the kitchen. Heidi created an environment that allowed the learners to discuss literacy practices rather than focusing on literacy as a skill itself.

The WHMIS module provided the learners with a clear purpose for learning, in which all the learners had to acquire a certain level of understanding of WHMIS concepts and safety procedures to be applied in their workforce. The learners also had strong goals for their learning experiences in the module as they wanted to be literate in their work placements. The WHMIS module, through an improvised format, allowed the learners to become more engaged in their work placements and also to reflect more critically on the different literacy practices that they engaged in.

The learners expressed different levels of understandings in how they applied WHMIS concepts to their work placements. Ian and Christian described in explicit details on how they applied their WHMIS and safety knowledge in their work placements or what they would do if they were not given adequate safety gear. In addition, Christian was able to identify the WHMIS hazard symbols and commented that he had seen them around his workplace. This indicated that Christian recognized that these symbols were significantly important and had some value. Three learners (Arthur, Johan and Lewis) had physical disabilities that affected their physical mobility or mental processing skills. Therefore, their ability to demonstrate a clear level of understanding was more limited than the other learners who were enrolled in the module. In the vignette, when the learners were sharing their experience on how they keep themselves safe, Arthur simply said that he knew he must keep his environment safe but does not elaborate on the *how's* and *what's*.

There was clearly a gap between several of the learners but this gap was only limited to how they *communicated* their answers and not about what kind of literacy practices they utilized in their work placements with respect to WHMIS concepts.

Heidi commented that because the pace of the WHMIS module was considerably slower than her other modules, she repeats key information constantly in each class that she teaches.

Heidi commented on her teaching strategies,

I'm just trying to use English, simple English, simple sentences... And I can see on their expressions whether they can, whether they're getting what I'm actually talking about or whether they're really confused, you know, in a class. So then, if I see that if it's not working, then I'm trying to change the way I teach, trying to pull out more pictures, trying to do role plays or use different strategies.

Through Heidi's instructional approach, the WHMIS module provided the learners with the opportunity to engage indirectly with their practices. By reflecting on their workplace experiences and issues, most of the learners were able to create meaning of the practices they engaged in. It was not necessarily the engagement of their own workplace practices that the learners derived meaning from but others' as well. As a community, the learners shared their common values, beliefs, issues and opinions on how to create a safer environment for the good of the Deaf LBS program site as a whole.

It is clear that the WHMIS module was a small community of practice. The learners shared common learning goals and demonstrated a clear purpose for learning, in which they acquired adequate knowledge of WHMIS principles and workplace safety knowledge. The WHMIS module was primarily teacher-centred but it was due to the complex learning needs of some of the learners who were enrolled in this module, especially those who had additional

disabilities. The instructional approaches in the course provided the learners with opportunities to collaborate with each other and share their personal experiences. This enabled the instruction to become more learner-centred and allowed the learners to create a shared repertoire of workplace experiences.

**Participation.** In the WHMIS module, there was little evidence of legitimate peripheral participation. Participation involves learners engaging in practices that may lead to their identities changing as they realize their full potential as legitimate members of a community of practice. However, it was not the case in the WHMIS module. The module was primarily teacher-centred in terms of instructional strategies. All of the learners had work placements at the Deaf LBS program site but some of the learners do not directly interact with other learners during their work placements. For example, Bonnie and Christian worked in the cafeteria whereas Ian performed janitorial duties elsewhere in the building. It was difficult to tell who the newcomers were and who oldtimers were as there was no evident hierarchy within the group. None of the learners were interviewed due to their separation from the main Deaf LBS program so it remains to be said whether legitimate peripheral participation did actually exist within the WHMIS module and their work placements.

**Summary and interpretation of WHMIS module.** The WHMIS module focused on literacy development in relation to workplace safety and WHMIS concepts. The learners enrolled in the WHMIS module had work placements that were within the building that housed the Deaf LBS program. The content of the classroom was predetermined by curriculum documents, guidelines and workplace safety documents. In the WHMIS module, the content focused on learners achieving awareness of workplace safety principles, understanding of hazard symbols and being able to critically reflect on situations that required knowledge about safety measures.

Through the use of English and visual literacy, these skills became literacy practices when learners extended those skills to making sense of their work placements. The learners actively discussed issues and resolutions they encountered in the workplace and connected these discussions to current content in the module.

The context of the WHMIS module was determined by its physical and non-physical elements. The WHMIS module was held in the same classroom as the Quilting module. Tables, desks and chairs were laid out to create a seating arrangement that allowed the instructor to be in front of the learners. The physical set-up of the classroom created a learning environment that brought forth a traditional feeling of learning, as seen in most school classrooms. The non-physical elements that helped shape the context of the learning setting composed of the learners' values, norms and culture. The learners placed value on their learning experiences because they were already actively engaged with their work placements. They considered it to be integral to their success and having knowledge of WHMIS concepts would provide them with more security. Workplace safety was an active topic in the module and learners shared their experiences with each other freely. They brought up issues they encountered in their work placements, discussed how they identified it was an issue in the first place and provided problem-solving strategies. Workplace literacy became a practice in the notion that it was hands-on and applicable to the everyday lives of these learners in the module.

The WHMIS module was primarily teacher-centred rather than being learner-centred. Some of the learners had multiple physical and mental disabilities, which made it difficult for teaching to be fuelled by learners themselves. The learners had clear purpose for learning in which they had goals and objectives that linked literacy learning to their work placements. In this module, the learners wanted to upgrade their workplace literacy skills. At a subconscious level,

the learners had yet to realize that they were engaging in workplace literacy practices in which they utilized basic knowledge of WHMIS and safety guidelines to carry out their work placements in a safe and efficient manner. To a certain degree, the learners engaged with their practices in a meaningful way. The learners participated in discussions about their work placements that garnered reflection and critical thinking about what kind of literacies they were engaging in. All these elements showed that the WHMIS module was a community of practice.

Compared to the other modules, participation within the WHMIS module was inconsistent when considering the role of legitimate peripheral participation. Roles of newcomers and oldtimers were not established as all the learners found themselves to have equal amounts of experience with respect to their work placements. Additionally, some of the learners had multiple disabilities which made their participation within the group difficult to ascertain. There was little evidence of the learners helping each other as they relied on the instructor to provide them with necessary information and feedback. However, there was a sense of mutual respect for each other as the learners liked to have discussions about their experiences in their work placements. Some of the learners connected with topics taught in the WHMIS module to their work placements, such as seeing hazardous symbols and material safety data sheets. Therefore, participation became meaningful to some extent as learners were engaged in their practices at a basic level. They did not demonstrate any potential to show that their identities as literacy learners were changing so it cannot be determined whether their participation was closely linked with their personal and professional learning goals.

## Pre-PSW Module – Learning about First Aid

*Three students are currently enrolled in this session of the Pre-PSW module: Jill, Xavier and Irina. Heidi is the instructor of the module. Irina is the only learner from the LINC program. The class recently went on a field trip to the Ontario Science Centre to learn about the human body. Today's class will still focus on the human body, but go more in-depth with the concepts.*

*Heidi writes down 'First aid kit' on the whiteboard. The class then takes the opportunity to discuss the different items that can be found in first aid kits and their respective functions. Heidi uses this moment to link first aid kits to real world scenarios, such as car accidents. Xavier says that first aid kits in the car are necessary in case if people have car accidents. "Sure, supposing you're in an accident, you crash. I guess you could go about trying to help by using their first aid kit," Xavier goes on to explain, "Not sure what help you could be, but obviously that's why you'd keep a first aid kit in the car."*

*"Right, it is important!" Heidi says, "Sometimes when you place a call to 9-1-1, you can be waiting a while, so you might be able to help." The class discusses how long it can take between placing a 9-1-1 call and the ambulance arriving at the scene of the accident. They also discuss what to do if there is no first aid kit at the scene of the accident.*

*Handouts on the contents of a first aid kit are distributed to the learners. She explains to the learners that vocabulary words of first aid kit contents are provided but there are five different languages represented for each vocabulary word on the handout. It is because she photocopied the handouts from an European vocabulary book. The English words are highlighted in yellow. Heidi asks the learners if they have ever seen some of these words. Irina says she does not know most of the words she sees. Vocabulary words such as tweezers, plaster (band-aid) and tape are discussed. The class continues to go over other first aid kit items listed on the handouts. The handouts also include different types of injuries and illnesses. Some of the concepts they cover are: safety pins, pain killers, splints, casts and fractures.*

*Heidi writes down 'diabetes' on the board. Jill immediately points to herself as she suffers from diabetes. "I know about diabetes!" Jill signs excitedly. "So how do you help a person who is going through a diabetic spell?" Heidi asks the learners. "Xavier?" She directs the question to Xavier. Xavier is unable to answer Heidi's question. Heidi takes the opportunity to act out to the learners, as if she was suffering from a diabetic spell. Irina suggests that if Heidi is dizzy, then her blood sugar must be low. She goes on to say that Heidi will then need to eat something sweet such as candy or have a drink of orange juice. Irina indicates that this is what she would do were Jill to have a diabetic spell as Jill often eats candy if her blood sugar is low.*

*Heidi tells Xavier that they have been re-visiting diabetes for four weeks now. She is disappointed that Xavier has not recalled much of the information he has been taught. Xavier reiterates, "This is in-depth stuff that only doctors need to know. I'm not a doctor!" Heidi is not satisfied with Xavier's answer and class is nearly over. She goes on to explain that knowing this information is important, especially if the learners want to consider a career as a PSW.*

*Noticing the time, Heidi reminds the three learners to complete their homework. She gives them some work and tells them it is a practice test for them to complete. The test is related to the information they covered in class today. "Try it on your own and if you feel you need to partner up, please do so afterwards. But try it on your own first," She encourages the learners. "Also you can use your book. However, do try and figure it out without looking at your books. If you can't and you want to find the information, you can do that with your books."*

**Content.** For the Pre-PSW module, the content was made up of the knowledge and materials that were part of the module. The knowledge referred to the concepts directly related to the PSW occupation albeit at a more basic, introductory level. In the vignette, the learners focused on the physical contents of a first aid kit, the different types of injuries and how to assess and follow through emergency situations. In other classes not included in the vignette, the learners also learned about the different medical specialities (e.g. neurologist, cardiologist) and the internal anatomy (muscles, bones and internal organs).

The materials and resources that facilitated the learning consisted of student workbooks, vocabulary sheets photocopied from a vocabulary book, commercial worksheets (photocopied from basic workbooks), computer-printed and hand-printed worksheets. The instructor had a copy of the PSW curriculum and modified her planning to best fit the needs of the learners within a strict timeline. Heidi often included materials and resources that were not print-based as part of her teaching approach. Recently, the class embarked on a field trip to the Ontario Science Centre to get a visual and up-close experience with the human body. Towards the end of the module, the learners will be taking another field trip to a long term care centre to see real PSWs in action. In one of the classes, Heidi brought in a foam puzzle of the human body in which the learners took turns putting the pieces (in the shape of human organs) together to form a complete human body.

**Context.** From a situated learning perspective, the physical elements included the description of the classroom, furnishings, set-up of tables/desks, resources, tools and educational resources that are present in the learning setting. The Pre-PSW module classes were held in the same room that also housed classes from the Quilting and WHMIS modules. Therefore, a description of the classroom can be found in the context analyses of both Quilting and WHMIS

modules earlier in this chapter. This included the set-up of the long tables, electronic equipment, presence of a movable whiteboard, the few occasional desks, minimal educational resources and a sense of bareness to the classroom. Within the Pre-PSW module, the non-physical elements consisted of the values, norms and culture that learners brought with them to the classroom. The values that the learners placed on their learning were somewhat unclear in the Pre-PSW module. At one point, Heidi reprimanded her learners when they did not do their homework and could not ascertain whether the learners actually had a genuine interest in taking the module.

In the interviews with both Jill and Xavier, they did not specifically discuss their experiences being in the Pre-PSW module. It was only in Jill's interview that she showed slight interest in taking the Pre-PSW module. She also linked her experience being in the module to the actual PSWs that can be found at the Deaf LBS program site as she said, "I can be social with everyone else in the building especially the PSWs. I enjoy chatting with them and learning more about what they do." Jill is a diabetic and in the vignette, she connected with some of the learning content and shared her experiences with the other learners in how she overcame her challenges and struggles as a diabetic. Because of Jill's condition, Irina was able to directly connect to the content and apply her knowledge in other contexts. Although Jill's employment goal was to go into the food industry, she demonstrated a willingness to be open-minded and explore other possible career avenues. Therefore, out of the three learners in the Pre-PSW course, Jill appeared to value the learning context the greatest.

Heidi felt that the Pre-PSW learners needed to value their learning more and take more responsibility even though they may not necessarily pursue this field of interest,

Some of the students... they lack really basic study skills [...] they don't know how to be organized, how to put down their notes, how to sort these things. And

from there, they can't do a really good job if they're not organized [...] So what I'm trying to do now is kind of focus on him getting really organized and starting to kind of build up the study skills, and then I know I can start focusing on him being more independent.

Therefore, Heidi was fully aware that the Pre-PSW module was more than about learning first aid concepts. She recognized the importance of teaching them basic academic skills such as study habits, organizational skills and note-taking skills. Heidi started to encourage the learners to value these new skills in addition to the ongoing literacy practices that were part of the Pre-PSW module. In addition, Heidi felt that the learners should value the learning context in of the Pre-PSW module as she explained,

PSW is one program but these guys... they need it for their real life as well [...] even through my PSW program is going to end now in March, that doesn't mean for me, I'm done with that student... that I'm not going to try anymore to build the study skills for him. I know I'm going to be with that student for another, what, four months, no... three months. So I'm hoping that during those three months, we can work on the study skills and slowly getting there, to leading him towards more independence.

**Community.** The Pre-PSW module was primarily teacher-centred because it was based around a defined curriculum. Therefore, it would be difficult to provide a learner-focused approach as the context of the learning was new and unfamiliar to most of the learners who were enrolled in the module. Although it may be teacher-centred, there were many opportunities for discussions for the learners to be involved with, which can then lead to a more community-based

learning focus. Heidi structured the learning in a way that enabled the learners to share their stories and experiences that revolved around health sciences.

There was a clear purpose for learning and all learners appeared to share the same goals for learning. The goals were more towards the short-term nature (passing the Pre-PSW exam) rather than being long-term (considering a career as a PSW). The learners were more concerned with understanding the information and passing the Pre-PSW exam to fulfill their module component as part of their program plan at the Deaf LBS program. Heidi had begun to see the Pre-PSW module as a way of building on other skills on top of teaching the curriculum. One of Heidi's goals was to introduce academic practices and organizational skills, as previously mentioned, within the context of the curriculum.

The learners were able to demonstrate different levels of understanding pertaining to the Pre-PSW module. Some of the learners, such as Xavier, tended to connect answers directly to different aspects of the PSW career. For example, in one lesson, Heidi asked the learners why it was important to know the names of the different specialists. Xavier then responded by saying it was because they may come across these terms when *dealing with their clients*. When the learners encountered a new term such as reflex, Heidi found it necessary to demonstrate what a reflex was rather than providing them with a textual definition. The use of demonstration and modelling in the Pre-PSW provided the learners with new ways of seeing literacy which is mediated through sign language. When the learners struggled with understanding new concepts, they were not afraid to address the issue. In their interviews, both Jill and Xavier commented that they clarify things with the instructors or even with other learners. Xavier acknowledged that there were sometimes situations where communication could be a barrier in the classroom as he

said, “All I have to do is say, you know, ‘Go back, repeat that, go a little slower’, that sort of thing so we tell each other those things.”

In the classroom setting, the Pre-PSW module was limited in providing the learners with opportunities to have real, hands-on learning that may lead to the learners engaging with meaningful literacy practices. Heidi was able to work around that barrier by focusing on what the learners already know or may know, such as with Jill’s diabetes, as seen in the vignette. The field trip to the Ontario Science Centre and the upcoming field trip to a long-term care center both show real potential in having the learners connect the knowledge they gained in the classroom to a real-life *practice*, where literacy comes to life.

The learners had similar learning goals and a clear objective to their learning although it was not inherently tied to long-term goals. The module was primarily teacher-centred because a curriculum must be followed and it would be difficult for the class to be learner-centred as all the learners did not have expertise in the PSW career field. However, Heidi encouraged active discussions to be part of the learning process in which learners were able to share their personal experiences with respect to the topics that were taught in the module. This enabled the learners to participate freely and reflect on health sciences issues. Finally, despite the lack of direct interaction with PSW concepts to make the learning more applicable and hands-on, this did not deter the learners in any way. Heidi provided the learners with opportunities to see practices in action and the learners were able to apply what they know to these practices. Therefore, the learners had solid opportunities to engage with their practices in a meaningful way and share these experiences with each other. In conclusion, the Pre-PSW module could be constituted as a community of practice.

**Participation.** The Pre-PSW showed different degrees of participation in the classroom that could contribute to the situated nature of the module. Jill tended to take on the role of leader in the Pre-PSW classes. She was older and more experienced in life than the two other learners in the class. At the same time, Jill suffered from certain medical conditions that do often come up for discussion. With Jill's medical conditions, the learners were able to relate to Jill and come up with their own opinions. For example, Irina was able to assess the severity of diabetes as a medical condition and knew that whenever Jill was suffering from a diabetic attack, Jill must then be given something sweet and sugary to cope with the attack. Roles of newcomers and oldtimers were not fully established as the learners were all new to this module which had a heavy focus on basic health sciences concepts.

When the learners were unfamiliar with certain health sciences topic, their level of participation tended to decrease. Heidi's role was to break down the topics into basic concepts in which the learners were more likely to understand. Heidi preferred to generate discussion among the group as she found that the learners were more likely to offer their input and at the same time, she can then assess their level of understanding. For example, the names of organs, muscles and bones came up in the unit and the learners had to know where the thyroid was located on the human body. Heidi would then point to her leg and ask the learners if that was indeed where the thyroid was. Thyroid, as a term, is extremely abstract to the learners and the learners had to learn to not rely on Heidi to provide them with answers that may or may not be correct. This increased participation among the group and sometimes the learners would make mistakes in correctly identifying the locations of human body parts, organs or muscles.

Although there was inconsistent evidence of legitimate peripheral participation, the learners took pride in establishing a community vibe among the group. Therefore, they liked to

help each other whenever they find the time to do so. Xavier was unsure about the difference between 'metatarsal' and 'finger'. Irina was able to differentiate between the two terms for Xavier, which he appreciated. Participation within the Pre-PSW module was meaningful because Heidi provided them with opportunities to *see* health sciences for what it is. However, the participation was limited in the notion that there was little direct relevance to the learners' personal and professional goals. The learners had a recent field trip to the Ontario Science Centre, where they were able to actively engage with the material and show high degree of participation. Towards the end of the module, the field trip to a long-term care center will allow the learners to become more immersed into the field and connect the classroom learning to real life situations. It was difficult to note a change in the learners' identities as it appeared that both Xavier and Irina will not move on to pursue careers in the PSW field. Jill, on the other hand, may be tempted to consider a career in this field because she liked to talk with real PSWs about what they do for a living. It remains to be said whether her intent is actually genuine or one out of curiosity.

**Summary and interpretation of the Pre-PSW module.** In the Pre-PSW module, literacy learning was extended to the application of English literacy skills and practices to Science literacy. In the module, the learners built on their content knowledge of first aid principles and general health sciences concepts (body parts, muscles, organs and bones) with the use of general vocabulary sheets, puzzles, diagrams, charades and field trips to science-related destinations. The content was guided by a modified curriculum in which only basic concepts were covered. For the learners, the content was abstract for most of the learners as they had little to no experience within this field – it was merely an introduction to a possible career path.

Classes were held in the same classroom as the WHMIS and Quilting modules. The tables were set up in a way that it resembled that of a traditional school classroom in which the learners faced the instructor directly. The whiteboard was used to convey information, highlight key terms and diagrams. As the content was based on a curriculum, the learners had to follow and meet expectations in which they must pass an exam at the end of the module. Therefore, learning was dictated by a curriculum in which set the content, and the physical context of the classroom provided a traditional learning environment. Values, norms and culture – the non-physical contextual elements of situated learning – were determined by the extent to which the learners valued their literacy learning experience within the module. The amount of value that the learners placed on their experiences was difficult to determine. Each learning activity was discrete from each other and did not culminate into a final product, which could be a practice in itself. Some of the learners took the module out of interest and to fulfil their program plans without any intent of pursuing a career in the PSW field. The learners preferred to have direct hands-on experience with the content in the right contexts in order for them to truly value the experience, such as the field trips.

The Pre-PSW module was taught according to a modified curriculum and most of the curricular content was unfamiliar to the learners. Therefore, the module took on a teacher-centred approach rather than a learner-centred approach. The learners had a clear purpose for learning and shared similar goals and objectives – they wished to pass the Pre-PSW exam in order to get a credit as part of their program plan. It did not tell us whether these goals and objectives could be extended to other literacy motives in which they could apply the knowledge to other contexts such as first aid situations in the home setting. Most of the practices could be considered meaningful to the learners, such as embarking on field trips that were related to topics

taught inside the classroom. The learners interacted with each other in a positive and friendly manner. Therefore, the Pre-PSW was a community of practice, based on these elements.

Legitimate peripheral participation was inconsistent in this module. All the learners had equivalent amounts of experience in relation to health sciences topics. There were no formal roles as newcomers and oldtimers in the module. Although there were good amount of helping and support within the classroom, the learners had yet to see new ways of themselves within the practice. Participation was somewhat meaningful in the tasks and activities that were part of the module – puzzles, vocabulary sheets and field trips. The more relevant the learning activity was to the topic, the more likely the learner participated. Therefore, within the Pre-PSW module, the learners saw the module as *learning for the instructor* (pass the exam) rather than *learning for themselves* (applying the context in other ways). Participation needed to be tied to both content and context in order for the community to flourish as a practice.

### **Computers with Seniors Module – Introduction to Excel**

*Four learners, all senior citizens, are enrolled in this module. Their names are Doreen, Victor, Gertrude and Camille. They all have completed the section on Microsoft Word and have just started learning about the different aspects of Microsoft Excel. Heidi starts off the class by asking the learners what they should do if they wanted to start up Microsoft Excel. Victor misinterprets Heidi's direction and Heidi notices that Victor has opened up Microsoft Word instead of Microsoft Excel. She reminds him that Microsoft Excel and Microsoft Word are two different programs and that he has opened up Microsoft Word by habit. Victor is looking at his laptop screen intensely, trying to figure out how to close Microsoft Word. Heidi tells Victor that he must cursor up to the X in the corner of the screen in order to close a program. Victor is able to close Microsoft Word and Heidi continues to guide him to opening up Microsoft Excel.*

*After everyone's laptops are checked, Heidi asks the learners to open up the start menu and click on 'All program' in order to find Microsoft Excel. After she requests this, she draws the 'All programs' submenu on the whiteboard. Camille appears to be squinting a lot and she keeps looking at Victor's laptop screen instead of her own laptop screen. Heidi continues to draw diagrams on the whiteboard to let the learners know how to open Microsoft Excel. The learners furiously copy down every single word and diagram into their notebooks.*

*Doreen has her program open but she is not sure what she is supposed to do next. Heidi remarks to her that nothing is to be done at the moment and that she should wait for everyone else to have their programs open. "Oh that's all? We're just looking at this spreadsheet?" Doreen jokes. The learners chat among themselves and Doreen tells everyone that she thinks*

*Heidi will explain about this 'big spreadsheet'. Doreen attempts to hazard guesses as to what the columns and rows are about.*

*As a reminder, Heidi emphasized the difference between Microsoft Excel and Microsoft Word to the learners, "If you want to type a letter, you pick Microsoft Word. If you want to make a form, you pick [Microsoft] Excel. For typing and documents, you pick Word."*

*Doreen offers her insight on Microsoft Excel and says that someone she knows used Microsoft Excel to make a membership list for a club as well as to contain information for polling. She goes off on a tangent and says that names of people and their addresses for federal government polling can be inputted. Heidi begins to clarify Doreen's answer but Doreen finishes Heidi's sentence and tells everyone that Microsoft Excel is generally used for accounting purposes. "Yes, it's an accounting program," Heidi explains, "Sometimes it's used as a timesheet program. It's also a budgetary program. You can enter in different numbers [too]. It's something called a spreadsheet." Heidi shows the learners the sign for 'spreadsheet'.*

*Victor's laptop screen has gone to sleep but he tells Heidi that he knew what to do. He explains that he had to click on something to make it come back to life. The next concept the learners work on is the management of sheets within a Microsoft Excel document. Heidi tells them that the learners can have different documents in the various sheets. The laptop operating systems are varied in this class – One has XP, two have Vista and one has Windows 7.*

*Doreen associates the tabbed sheets of Microsoft Excel with the pages of a book. She expresses to the other learners that she could do many things with Microsoft Excel such as lists.*

*"I'm retired. I don't need to do anything!" Gertrude jokes.*

*Doreen continues with her spiel saying that she can use Microsoft Excel to make classifications of groups easier. "What I'm really going to use [Microsoft] Excel for is making a list of things we need to buy to stock the [gift] store downstairs because I'm in charge for that."*

**Content.** The knowledge was related to the development of literacy skills and practices in the form of computer literacy. The materials that guided the literacy learning experiences constituted of computer laptops, computer equipments, student notebooks and computer instruction guides. The learners were deaf senior citizens who wanted to pursue basic computer skills for both personal and professional reasons. At the time of the research study, the learners had exposure to Microsoft Word and were starting the Microsoft Excel unit. They learned how to navigate from the desktop to the Start menu to the computer software program of choice. With Microsoft Excel, the learners worked on their development of computer literacy by learning new vocabulary such as: spreadsheet, column, row and sheet. In addition, they learned how to organize their data on the spreadsheet and how to save the data to its correct location on the hard drive.

All the learners were new to computers and therefore, Heidi had to modify her teaching approach to fit the needs of the learners with respect to the pace of teaching new concepts and building on previous knowledge. Heidi explained that she took things a lot slower with the learners in this module due to their limited experience with computers,

These learners are former Microsoft Word students [...] and it wasn't very in-depth teaching for them. We taught them functions like saving, how to type, word processing. These learners have asked me before if they could learn Excel and I guess that's because they want to know how to budget [...] I have to be very clear because they are new to computers.

Heidi talked about relying on her learners to provide her with the necessary feedback so the learning can be shaped according to their needs. At the end of every class, the learners played computer games such as the Maven Beacon typing game. After the learners have learned the basics of Microsoft Excel, Heidi planned to move them on to a new concept: navigating the Internet.

**Context.** The Computers with Seniors module was held weekly on Tuesday mornings in the same classroom where the Quilting, WHMIS and Pre-PSW modules were located. At the time of the research study, the learners only had five more weeks until the completion of the module. A physical description of the room can be found in the Context sections of both modules in the earlier sections of this chapter. In terms of physical appearance of the classroom, the only difference between the two modules and the Computers with Seniors module was the seating arrangement. A total of four long white tables were used to set up the seating arrangement in the shape of a square and the whiteboard was still present in the room. Heidi had her own table in which she can use to support her own laptop and teaching materials. Some of the teaching

materials include computer know-how books (Microsoft Office and general software programs). Camille and Victor occupied a table together opposite Heidi. Doreen and Gertrude had their own table opposite each other. Each learner had a laptop situated in front of him or her. Some of the laptops were old despite having newer operating systems installed on the hard drives. The older laptops often shut down randomly which interrupted the ongoing learning of the module. A student notebook could be found to the side of each laptop, which the learners used with a passion to copy down the notes and diagrams that Heidi wrote on the whiteboard.

The non-physical elements were the values, norms and cultures that were part of the learning environment. The learners placed tremendous value on their learning experiences in the module. Heidi talked about the learners wanting to learn Microsoft Excel for various reasons: budgeting, organization of lists and general accounting tasks. The teaching of Microsoft Word was considered to be valuable to the learners as well because they could use the program to write letters, memos and other documents. One of the learners, Doreen, worked in the gift shop of the site that housed the Deaf LBS program. She had a desire to learn Microsoft Excel so she could use the program as part of day-to-day operations in the gift shop.

According to Heidi, the attitudes of the learners contributed to the learning experiences of the learners in the module. "I love this group. They're just wonderful. It's a nice pace, good attitudes." Heidi commented on working with the learners in this module. Prior to learning Microsoft Excel, the learners learned the basics of Microsoft Word and they placed value on using the word processing software because they will then be able to write letters and notes electronically.

**Community.** The module was teacher-centred as all the learners in the module were new to computers. There are two primary reasons for this approach: age and expertise of the learners. The learners were senior citizens and their pace of learning was slower than the regular learners in the Deaf LBS program. In conjunction with the expertise of the learners, the learners were unfamiliar to the world of computers and introduction of topics had to be spread out accordingly. It would be difficult for the learning to be learner-centred as the learners were considered newcomers to the topic of computers and therefore, they all relied on Heidi's guidance to provide them with learning topics.

The learners all had a clear purpose for learning as they wished to develop computer literacy skills for both personal and professional reasons. The tasks and activities that were part of the Computers with Seniors module were integral to the literacy learning experiences of the deaf learners in the module. Examples of tasks such as writing a letter and creating a budget were examples of literacy practices in which learners utilized to deepen their understanding of computer literacy and numeracy. The tasks and activities were simple, straight-forward and concrete in both theory and application. They were directly connected to the learners' lives and their desires to continue their learning journeys.

The learners demonstrated different levels of understanding in the module. As previously stated, the learners were senior citizens and therefore, teaching strategies were extensively modified to accommodate their learning paces. At the beginning of each class, Heidi reviewed concepts that the learners had worked on in prior lessons. Learners relied heavily on Heidi to provide them with input, feedback and resolutions through the acts of demonstrations, modelling, guidance and direct teaching. In the observed classes of this module, there were very few occurrences in which learners took the initiative to identify a problem and resolve the problem

on their own using problem-solving techniques. Examples of struggles that the learners encountered were: navigating to the correct program, re-starting the computer, fixing the scrolling on the screen, saving documents and using the mousepad correctly.

The majority of the time spent in the module, the learners were unaware that they had problems to solve, such as opening Microsoft Word instead of Microsoft Excel without realizing it was the wrong program. Heidi performed numerous rounds in which she checked each and every learner's laptop to ensure that they were on the right track. Whenever she saw that a learner had done an incorrect task or had a problem, she guided them into the right direction and showed them how to solve the problem using a variety of teaching approaches. Heidi also capitalized on the strengths of the whiteboard to provide the learners with visual representations of instructions, solutions and time-saving tips in using certain software programs, in which all the learners appreciated. Most importantly of all, the learners enjoyed the events in which they realized they could understand the task, activity or concept that they were currently working on. When this occurred, they often expressed joy and excitement and often shared these experiences with the other learners. This allowed the other learners to see that the activities were not impossible and therefore, if someone could do it, then he or she could do it as well.

The Computers with Seniors module could be considered a community of practice. It is teacher-centred as the learners were extremely new to the topics that were part of the module. The learners engaged in practices that were considered to be of value to their literacy learning experiences through shared resources and tools. Moreover, the tasks, activities and concepts were directly related to real world applications. Finally, an important defining element of a community of practice was having the learners achieving a clear understanding of what they wished to learn as well as having shared goals and objectives. Personal and professional motives

come into play here as all the learners wished to acquire computer literacy as part of their lifestyles.

**Participation.** In the Computers with Seniors module, there was little evidence of legitimate peripheral participation as the learners were all equally new to the subject of computers. Roles of newcomers and oldtimers had yet to be established. Due to the learners' lack of experience, it was difficult to observe clear acts of helping within the learners. However, praise and positive feedback were regular occurrences in the model. Victor will often thank Heidi for coming out to teach the morning's class and Heidi will offer positive feedback and praise to the learners when they overcome difficulties on their laptops. When learners become deeply rooted in the practice, their identity as a literacy learner may change as they explore new ways of seeing themselves. Although the learners were only introduced to basic programs such as Microsoft Word and Microsoft Excel, some learners already saw potential in themselves according to what they were learning. In the vignette, Doreen saw herself as a better contributor to the gift shop that she works at. By having new knowledge of both Microsoft Word and Microsoft Excel, she felt that she was better able to negotiate the day to day operations of the gift shop by gaining new skills in word-processing and spreadsheets. However, these skills were not necessarily *skills* as they can be converted to *practices* when used within the gift shop setting.

The learners actively engaged with their activities and tasks within the module and found them to have a clear purpose to their learning and therefore, their overall participation was deemed to be meaningful to their literacy learning experiences. The tasks and activities were enjoyable for the most part, as seen with the educational games, and were connected to the goals and objectives of the learners. Participation was also facilitated through Heidi's continued support and guidance throughout the module. She made the learning fun and worthwhile but at

the same time she paced the learning to be within the needs of the learners. Therefore, with Heidi's modifications, the learners were able to participate within their limits and share their experiences with the other learners in the course.

The module is only held on a sessional basis and at the time of the research study, five weeks remained for the learners to complete the module. At the end of five weeks' time, legitimate peripheral participation would not likely occur. If the length of the module was extended, it remains to be said whether legitimate peripheral participation would be evident.

**Summary and interpretation of the Computers with Seniors module.** The Computers with Seniors module focused on the development of computer literacy skills and practices for both personal and professional reasons. Learners acquired basic knowledge of both Microsoft Word and Microsoft Excel through the use of laptops, student workbooks and computer instruction books. The content supported the learners' wishes to learn word-processing and spreadsheet skills in order to perform literacy practices such as writing a letter, budgeting purposes and creating lists.

The classes were held in the same classroom as the WHMIS, Quilting and Pre-PSW modules. The physical layout of the classroom was changed so that the learners congregated together in order for all laptops to be connected electronically. The instructor still remained at the forefront of the classroom. The whiteboard was used to support the instructor's teaching in which diagrams, screenshots and keywords were drawn and written. The learners copied down this information in their notebooks in order to recall information. The learners placed great value on their learning experiences because they showed great care to follow through on the instructor's teachings and discussed possible applications they could do with their new

knowledge of Microsoft Word and Microsoft Excel. Not only they were senior citizens, they were adult learners who clearly appreciated their learning experiences.

All the learners were new to computers and relied on the instructor to guide them through the different learning activities. The learning was heavily teacher-centred but there were times when it became learner-centred, such as having 30 minutes at the end of every lesson to play educational software games. The learners had strong learning goals and objectives as they all wished to gain basic computer literacy skills in order to use these skills as practices. Therefore, it was clear that the module was a community of practice.

Evidence of legitimate peripheral participation was inconsistent in the Computers with Seniors module. All the learners had equal amounts of experience with computers and all were new to computers so roles of newcomers and oldtimers were not established. There was little evidence of helping within the module because the learners were for the most part, unfamiliar with computers and cannot provide that kind of physical support to other learners. It was difficult to see whether the learners had yet fully seen themselves as literacy learners in relation to their personal and professional goals. However, they did see *potential* in what they were learning (e.g. using Microsoft Word to create lists to run the gift shop more effectively) and instead took value in that.

### **Overall Summation of the Chapter**

The research study yielded rich and rewarding findings that described the situated nature of literacy learning within the Deaf LBS program. Analysis of the literacy learning settings using the four elements of the situated learning framework found that each of the learning setting could be constituted as distinct communities of practices of varying degrees. The findings clearly showed that deaf adult literacy learners thrived in learning environments where communities of

practices existed. Communities of practices can be flexible according to the context in which learning is situated. Learning does not necessarily need to be learner-centred in order for a community of practice to exist on theoretical grounds. Consequently, several of the modules and classes in the Deaf LBS program took a teacher-centred approach because it best fits the needs of the deaf learners themselves. The instructors provided the tools to create the context in which communities of practices can flourish. In conclusion, the findings of the study showed that Wenger's (1998, 2007) work on communities of practices can encompass the cultural and social needs of Deaf literacy learners. Moreover, barriers were identified through data analysis in the reflective journal. In the analysis of the reflective journal as a data source, learning materials, ASL-English linguistic difficulties and negotiation of identities were all considered as barriers that were part of the lived experiences of the members in the Deaf LBS program. Interpretation and discussion on these barriers will be explored in the next chapter.

Based on the findings of the research study, four socio-cultural themes emerged from the data: ASL as a shared language, the role of instructors, new literacy practices and personal development. All four themes could be seen within the situated learning framework within this chapter. Moreover, these four socio-cultural themes contributed to the socio-cultural nature of the Deaf LBS program and more importantly, the lived experiences of the deaf and hard of hearing learners themselves. ASL as a shared language facilitated literacy development within a supportive learning environment. This learning environment, the content and the context was created primarily by the instructors. The modules and classes were seen as communities of practices, which allowed for the formation of new literacy practices. These new literacy practices became meaningful to the learners when their context became applied in other domains of life. The lived experiences of the deaf learners themselves showed how personal development – self

esteem and confidence – added to the richly socio-cultural nature of the Deaf LBS program. These four themes will be expanded upon in the next chapter but a short description of each socio-cultural theme is described below:

**ASL as a shared language.** A shared language among the learners and instructors facilitated the literacy development of the deaf learners who were enrolled in the different modules and classes offered by the Deaf LBS program. The teaching of English through a different language, ASL, alleviated a barrier faced by many deaf people in today's society. Moreover, when a language is used, valued and situated within social and cultural contexts, the potential for learning dramatically increases. A supportive learning environment is maintained through the use of a shared language and further contributing to the socio-cultural theory of learning.

**Role of instructors.** Instructors were pivotal in the structuring of the on-going learning that was part of the Deaf LBS program. For most of the modules and classes offered by the Deaf LBS program, the instructors created seamless opportunities for learners to participate within meaningful social and cultural contexts. Content was shaped purposefully and facilitated through carefully selected teaching and learning strategies. The instructors were mentors, role models and guides to many of the learners of the Deaf LBS program. They provided a safe place for learning and built on the confidence of the deaf learners in the Deaf LBS program. Most importantly of all, the learners were connected to the instructors because the instructors had familiarity and understanding of the Deaf culture in terms of language, culture, norms and values.

**New literacy practices.** New literacy practices emerged as a socio-cultural theme from the findings of the research study. Learning through a situated learning framework enabled learners to engage with other learners in their learning settings, make meaning of the content

within social and cultural contexts and furthermore, led the formation of distinct communities of practices. The role of literacy became situated in the everyday lives of the learners themselves and they were beginning to see new ways of using literacy within different domains of life. The socio-cultural approach of the study showed that literacy was valued as a practice instead of being viewed merely as a skill. For many of the learners in the Deaf LBS program, the literacy practices had a cultural fit and added to their lived experiences as deaf literacy learners.

**Personal development.** Learners built on their lived experiences as deaf adult literacy learners through their participation and interaction with other learners and instructors in the Deaf LBS program. The mutual support and rapport seen among the members of the Deaf LBS program allowed the learners to feel more empowered as deaf adults. Moreover, they reported an increase in their confidence levels as they continued to embark on their journeys as deaf adult literacy learners. The situated learning framework showed that learners were beginning to see new ways of themselves within different social and cultural contexts. Therefore, their literate identities were becoming realized as the learners deepened their ties to each distinct community of practice and the Deaf LBS program itself.

## Chapter 5: Discussion and Contributions

This chapter discusses the findings of the research study pertaining to the proposed research question and its potential contribution to research, practice and policy. Firstly, the research question will be addressed to explore how the socio-cultural elements encompass the literacy learning experiences of deaf and hard of hearing learners. Secondly, discussion of the study's contributions to research, policy and practice will be explored within the contexts of adult literacy education.

The findings of the research study indicated that learning within a socio-cultural lens occurred at the Deaf LBS program from a situated learning perspective. Moreover, there was evidence that there were varying degrees of communities of practices that existed within the Deaf LBS program. Each layer of the Deaf LBS program was represented in the research study as a discrete class or module. However, the findings clearly showed that the Deaf LBS program itself was a community of practice when all layers and components were integrated within each other. It was a place of belonging, pride and community. From a situated perspective, learning is more about doing. In other words, it is more about *being in the experience* rather than *learning from the experience itself* (Wilson, 1993).

The next section will describe how the socio-cultural elements of the Deaf LBS program contributed to the literacy learning experiences of deaf and hard of hearing learners, which was the primary research question of the study. The four components of situated learning as proposed by Stein (1998) helped paint a picture of literacy as a social practice within the Deaf LBS program. In addition, four themes emerged from the findings and interpretations of the study: ASL as a shared language, the role of instructors, personal development and new literacy practices, all of which will be discussed in addition to the research questions. The emergent

themes play a pivotal role in addressing the primary research question, which will be discussed after the next section. Moreover, the secondary research question addresses the issues of barriers that faced the instructors and learners in the Deaf LBS program. The exploration of these barriers reduces the gap between theory and practice with respect to deaf literacy learning.

### **Addressing the Research Questions**

The primary research question of the study, “How do the socio-cultural elements of the Deaf Literacy and Basic Skills program contribute to the literacy learning experiences of deaf and hard of hearing adult learners?” was answered through the four elements of situated learning (Stein, 1998). These elements – content, context, community and participation – described the ongoing literacy learning that occurred within the realms of the Deaf LBS program. The secondary research question, “What are the barriers encountered by the deaf adult learners, deaf newcomer adult learners and instructors in the Deaf Literacy and Basic Skills program?” was answered through the analysis of the reflective journal as well as the overall analysis of the research study. A short discussion on how the role of barriers expands our understanding of deaf literacy programs and deaf literacy learning will follow.

#### **Answering the primary research question.**

***Content becomes the practice and not the skill.*** In the six literacy learning settings, the content in each setting made up a diverse body of knowledge and materials that all contributed to the literacy learning experiences of the deaf learners. The content seen in the learning settings fostered the development of literacy, numeracy and computer skills. While these types of literacies could be considered as *skills*, it was more important to recognize that the content of the learning settings paved the way for the skills to be transformed into *practices*. The content was flexible, easily adaptable and appeared to fit the needs of the learners within their goals and

objectives. When the content of all literacy learning settings were taken into consideration, the content could be directly related to real-world concepts and applications. In other words, the content shaped the context of the learning setting. The instructors purposely chose the materials to reflect practices in which learners can engage and knowledge was built upon and valued by these learners.

In the LBS 1 and 2 classes, English literacy skills were enhanced with the introduction of real world concepts such as public transportation and nutrition. The Quilting module became a new literacy practice through the use of numeracy and visual literacy. The WHMIS module had learners work with safety concepts that were already found in their workplaces. The Computers with Seniors module had learners working with both Microsoft Excel and Microsoft Word for personal and professional reasons. Finally, the Pre-PSW module supplemented the learners with not only basic knowledge of health sciences but actual hands-on experience through the use of field trips. Therefore, the content of the learning setting directly reflected the goals and objectives of the learners. Connection of content to real world applications through hands-on approaches created the best opportunities for learners to become integrated within a community of practice and further deepened their literacy development. In other words, content became ingrained in the practice rather than contributing to a learner's skill set.

***Context shapes the experience.*** The context of the literacy learning setting relied on the physical and non-physical elements to work in conjunction to shape the setting. For most of the classes and modules, the learning setting was typically close to that of a traditional schooling setting. The instructor, for the most part, was always front and center with the learners facing the instructor. However, a benefit to the set-up of the classrooms was the way the seating arrangement was laid out. As the primary language of communication in the setting was ASL, it

was extremely important that all learners had maximum face-to-face exposure with the instructor and the other learners. This provided learners with the opportunity to interact with each other and feel as if they were part of a core group rather than simply a class made up of students.

Therefore, the learners had a role in shaping the physical context which then added to their overall literacy learning experience at the Deaf LBS program.

The non-physical contextual elements of the literacy learning settings were the values, norms and culture that were brought by the learners as well as instructors. When the learning setting becomes non-traditional and informal, the context is shaped by the learners. This was evident in the Quilting model where the learners were free to move about the classroom and partake in a number of activities at their own pace. The role of the instructor was reduced and the learners became the determinants of how learning will occur in the classroom. Will the learner be working on their vocabulary sheets? Will the learner be using a sewing machine? Will the learner be seated at a table working on the quilt? The learner ultimately valued his or her learning experience by the choosing of activities within their own goals and expectations. Other modules and classes took a more traditional approach to learning. In these learning settings, it was often up to the instructor to facilitate most of the context in the setting. The instructor then set the topic, the expectations and the plans for how learning will occur. An example of a learning setting that utilized this approach could be seen in the WHMIS module where the instructor set the agenda of what was to be learned and proceeded to follow through on that plan.

Although certain classes and modules took a more traditional approach, it did not reduce the nature of situated learning within these settings. The backgrounds and experiences of the learners also shaped the context of the learning settings. Learners who were new to certain topics and concepts had little input in how learning was to be achieved, as seen in the Computers with

Seniors module. On the other hand, when it became apparent that experience played a role in learning, then it was easier for the learners to be part of the context, as seen in the Quilting module. The value that learners placed on their learning could be related to the content of the learning setting. Content that was abstract both in theory and practice can be difficult for a learner to place a value on his or her own experience. For example, the Pre-PSW module was based around a modified curriculum that had a heavy emphasis on health science concepts. Some of the concepts were far more advanced than what the learners were used to such as the scientific names of muscles and bones. Moreover, one of the learners in the module expressed no interest in pursuing a career in this field yet this learner was taking the module as part of his program plan. Therefore, the context of the learning setting relied on how the learners and instructors use and value the content.

*A community of practice is composed of discrete communities of practice.* The findings of the research study clearly showed that all six literacy learning settings were discrete communities of practices of different degrees. These six literacy learning settings amalgamated to form a single richly cultural community of practice, which was the Deaf LBS program itself. Within the context of the Deaf LBS program, communities of practices can take either a teacher-centred or a learner-centred approach. When learning becomes teacher-centred, it did not necessarily mean that the roles of the learners within the community became reduced. Instructors provided the tools to the learners in order to create the context in which communities of practices can emerge from.

A teacher-centred approach in certain modules and classes could be due to a number of reasons: (a) learners may not necessarily have enough formal schooling experience; (b) learners may be relatively new to the Deaf community in terms of cultural norms and values; (c) the

content was driven by a teacher-led curriculum; and (d) there may be extenuating circumstances such as learners being physically disabled or developmentally delayed. It is important to recognize that in deaf literacy learning contexts, communities of practices thrive when learners are given the opportunity to share their experiences, personal insights and reflections with other learners when these moments are related to the learning activities. Additionally, the sharing of experiences in connection with literacy learning enables learners to build a shared repertoire of stories, resources and tools.

The Quilting module was rich example of what a community of practice should be about. It was learner-centred, goals and objectives for learning were clearly stated and the activities were integral and meaningful among the learners. The Quilting module was a literacy practice in itself and learners were able to connect to the practice as part of their literacy learning experiences. The activities in the Quilting module were directly connected to the practice and easily transferable to the home and other domains of life. When learners became the instructors, they were able to engage with the practice and truly reflect on what they are doing. Learning was in the experience and when members became legitimate in the community, learning became meaningful. This further contributed to the socio-cultural nature of the Deaf LBS program.

In both LBS 1 and LBS 2 classes, the instructor integrated real world concepts to make learning more applicable and relatable to the daily activities of the learners in the classes. This strategy was beneficial for both the instructor and the learners because the learners then have the potential to *create* learning opportunities through active discussion and participation. In the WHMIS module, several of the learners had additional disabilities that are both physical and mental, which made it difficult for learning to be learner-centred. However, the instructor used the learners' own work placements to facilitate active discussions about workplace safety issues.

The Computers with Seniors module contained learners who had little to no experience with computers. However, it did not deter learners from sharing ideas of how they could use the computer programs outside of the home such as creating budgets and lists. The Pre-PSW module was taught according to a modified curriculum and the learners had little to no experience with health sciences. The instructor of the Pre-PSW module felt that for learners to get more out of the learning experience, having the learners go on field trips to *experience* health sciences was the best approach to shift the teaching from being teacher-centred to learner-centred.

For most of the modules and classes, a teacher-centred approach fit the needs of the learners. The instructors who taught these modules and classes provided the tools and context for learning to occur within the learners. Therefore, the instruction became deliberate as to create opportunities for critical thinking and discussion among the learners. This allowed learners to share their experiences with each other and provide feedback and reflection on these experiences. With this approach, the modules and classes became communities of practices in their own right.

It is essential to recognize that the amalgamation of the six discrete learning settings added to the importance of the Deaf LBS program being a community of practice itself. Literacy learning does not need to be constrained to individual classrooms. Literacy learning could be found in the everyday activities that were part of the Deaf LBS program. There were regular group meetings before the start of the morning classes in which all the learners congregated together to discuss current events at the Deaf LBS program. Birthdays of learners and staff members were celebrated extensively with learners often giving celebratory speeches about the learner whose birthday is being celebrated. Break times and lunch were opportunities for the learners to socialize with each other in the cafeteria. Many learners often find the time to participate in intramurals in which they compete against other Deaf LBS programs in sports such

as volleyball. Field trips were common occurrences and recently, the learners had a field trip to Quebec City where they connected the history they learned in class to the actual history that they experienced when they visited Quebec City.

At the time of the research study, the 2010 Vancouver Olympic Winter Games was held in the province of British Columbia. As many of the learners in the Deaf LBS program come from different countries outside of Canada, the learners used the Olympic Games to come together as a support system. Some of the learners celebrated their identities as new Canadian citizens. They learned the names and signs of countries that other learners came from. They also learned about different flags that represented the countries at the Olympic Games. In the morning group meetings, the learners often discussed what events they watched on the television the night before. To have the opportunity to share profound experiences can be constituted as a literacy practice in itself. All these events enabled the Deaf LBS program to be a well-defined, clearly established and richly cultural community of practice.

***Participation is integral to learning.*** From a situated learning perspective, participation is inherently linked to a community of practice in which the fully realized potential of a community of practice can lead to the existence of legitimate peripheral participation. Participation was seen in the daily interactions and dialogue between learners and instructors, in which meaning-making and reflection were critical to the emergence of socio-cultural elements that added to the Deaf LBS program being a community of practice. In the six literacy learning settings that were described in the previous chapters, only one learning setting had evidence of legitimate peripheral participation. The Quilting module typified legitimate peripheral participation within its community of practice. Roles of newcomers and oldtimers were established and acts of helping and support were continuously observed in the module.

Participation was connected with the use of real world applications and integral tasks that were also linked to the learners' literacy goals and objectives. Furthermore, the degree to which the learners engaged with their activities allowed them to see new ways of themselves as deaf learners.

The five other modules and classes – LBS 1, LBS 2, WHMIS, Pre-PSW and Computers with Seniors did not have consistent elements of legitimate peripheral participation. Some of the learning settings did not have clearly defined roles of newcomers and oldtimers as the learners typically found each other to be of equal expertise with respect to literacy learning. Therefore, it would be stringent to say whether acts of helping and support were precipitated by these roles. The WHMIS and Computers with Seniors modules both had learners who were unable to establish roles of newcomers and oldtimers to allow the community to be more legitimate in nature. The learners did not necessarily feel comfortable with assigning roles nor did they attempt to. In other learning settings (LBS 1, LBS 2 and Pre-PSW), the learners were more legitimate with their participation within their small communities compared to the WHMIS and Computers with Seniors modules. However, in these three learning settings, the context was shaped largely by the instructor and the learners relied heavily on the instructor to provide the learning content. Helping and support can be accomplished in communities where legitimate peripheral participation is not largely existent. It is truly the good-natured spirit of the Deaf LBS program that encourages learners to pay it forward – they helped others without realizing that they were doing acts of helping.

Therefore, the learners' participation became more specific to the context of the individual learning setting and largely dependent on whether their goals and objectives for learning matched that of the individual community of practice compared to that of the Deaf LBS

program community of practice. In the Pre-PSW module, the context was largely abstract although there were opportunities for the learning to become hands-on and connected to real-world applications. Some of the learners in the Pre-PSW module found it difficult to connect with the learning materials and therefore, their participation became reduced in the notion that it was not applicable to their personal and professional goals. On the other hand, in both the WHMIS and Quilting modules, participation was influenced by the learners' willingness to learn the content because they all found it to be tied to other domains of life (e.g. home, workplaces).

Participation was guided through the integral tasks in which learners engaged within the learning settings. When the learning goals and objectives became clear in contextual form, participation was then enhanced by the learner's ability to connect with the knowledge and material content through meaningful practices. Moreover, their identities as deaf literacy learners became more refined when learners experienced new ways of seeing themselves within different contexts. When all the discrete learning settings were combined together to become part of the Deaf LBS program, participation could then be seen in vast measures. The members of the Deaf LBS program became a richly defined community of practice, a second home and a second family for many of the learners. There was tremendous amount of support seen within the walls of the Deaf LBS program. Newcomers came into the program as new learners and were welcomed readily by oldtimers. Members supported and guided each other and the activities of the Deaf LBS program became vital practices. Literacy was not functional for it is both social and cultural. Through participation and engagement in social practices, the Deaf LBS program embodied the idea that literacy was a transferable medium where meaning was shaped by those who value literacy for what it was – a social practice.

***Role of situated cognition.*** Situated cognition considers the process of learning to occur within social and cultural contexts and it is inherently situated within the everyday activities that occur in these contexts. When learners ultimately engage with tasks and activities in a community, they have the opportunity to reflect on their change in identity as learners depending on the context of what is being learned. Going back to Wilson's (1993) poignant statement on the situated nature of knowledge is important as he argued that knowledge is more about being in the experience rather than learning from the experience. Situated cognition can enable a learner to make meaning about being situated in the experience rather than the discrete activities that comprise the experience itself. According to Brown et al. (1989), "the activities of a domain are framed by its culture" and these activities can be considered integral to the community when they are agreed upon by the members of the community (p. 34). Embedding activities within contexts that are relatable to real world concepts may play a role in enhancing the cognitive processes of the learners who are involved (Brown et al., 1989).

The learners of the Deaf LBS program engaged in meaningful and integral activities that emphasized real world concepts within the six literacy learning settings and the greater community setting of the Deaf LBS program. Although some of the learning activities were constrained to a somewhat traditional classroom setting, the focus on real world application were always highlighted. Both LBS 1 and LBS 2 classes learned about public transportation and nutrition. The Computers with Seniors module had the learners working on Microsoft Excel and Microsoft Word for both personal and professional reasons. Quilting module learners had tremendous hands-on experience working with quilting and sewing concepts and activities. Learners in the WHMIS module connected the learning content to their work placements with the use of hazardous symbols, which could be seen around their work placements. The Pre-PSW

module, albeit abstract in nature, brought a real world sense of learning to the context of the module when learners participated in a field trip to the Ontario Science Centre.

For many of the learners, their literacy goals were to simply acquire or upgrade their English literacy skills in addition to numeracy and computer literacy. The Deaf LBS program took a unique approach to having learning activities to be related to real world concepts in order to make literacy acquisition more practical and hands-on. Many of the learners had immigrated to Canada from non-English speaking countries and were still learning the cultural aspects of Canada as a country. For some of the learners, learning about public transportation, filling out government forms, learning how to request for an interpreter during medical appointments and borrowing books from a library were unfamiliar concepts. Some of the learners had little or no experience with formal education and therefore struggle with critical thinking and reflection of their experiences as deaf literacy learners. Knowing about the *how's* and *why's* were important factors in the provision of learning activities in the Deaf LBS program. Connecting the development of critical thinking skills to real world concepts seemed to build on the cognitive abilities of the deaf learners in the Deaf LBS program.

The length of the data collection period at the Deaf LBS program was relatively short albeit producing vast amounts of data. In interviews with the learners, many of the learners struggled with describing a deeper level of their experiences as deaf literacy learners. What does it mean to be deaf? What is it about the program that truly contributes to the literacy learning experience? The questions were very novel to the learners and they had not been exposed to these reflective questions. This was not a reflection of their cognitive abilities but more of the research environment that played a role in this part of the research study. Consequently, some learners were not able to describe a learning activity they had recently completed or how a

learning activity such as learning the names of food items, connected to their personal lives. Learners who were at the higher levels of literacy (LBS 2) were more descriptive in their answers and could provide insight in how learning shaped their personal lives. In the interview phase of the research study, three learners (Timothy, Marc and Xavier) all described how important literacy was in their lives in addition to their literacy goals. These learners were able to negotiate how being a deaf literacy learner shaped their experiences in the Deaf LBS program as well as other domains of life. In Figure 1, situated cognition can shape the learning setting and therefore, the literacy development of a deaf individual. For some learners, the use of real world concepts enabled learners to reflect on their experiences as deaf literacy learners, as seen with Timothy, Marc and Xavier.

If data collection had been extended over a longer period of time, there may have been an opportunity to have situated cognition emerge as a more dominant theoretical framework compared to situated learning. Further research is needed to explore how situated cognition as a concept play a role in the literacy development of deaf and hard of hearing learners within adult literacy programs.

**Emergent socio-cultural themes.** Four themes of socio-cultural nature emerged from the analysis of data that added to the socio-cultural theory of learning within the context of adult deaf literacy. When data from the five data sources of the research study were analyzed and interpreted, patterns and regular topics were highlighted as possible contributors to the socio-cultural theory of learning within the Deaf LBS program. These patterns and topics were classified into four distinct themes and these themes were compared with other data sources as part of triangulation. The themes provide insight on how socio-cultural elements can shape literacy learning within a situated learning framework. The four themes are as follows: ASL as a

shared language, the role of instructors, new literacy practices and personal development. Each theme will be explored as to how they contributed to the socio-cultural nature of the Deaf LBS program and their further implications.

*ASL as a shared language.* First and foremost, in order for literacy learning to be meaningful and integral to the lived experience of deaf and hard of hearing adult learners, there must be a commonality between the learning group and the person that provides the learning, which is the instructor. There are so few Deaf LBS programs in the province of Ontario (currently 14 out of 300) and these Deaf LBS programs are typically found in metropolitan cities. Deaf learners who reside in cities without a Deaf LBS program typically enrol in regular LBS programs that are primarily geared towards hearing adults. There is question of whether regular LBS programs have the ability to provide equitable services to deaf learners despite lacking adequate resources and tools that supplement deaf literacy learning. Consequently, the language barrier may deter the deaf learners from further literacy learning when it is so greatly needed and encouraged.

When learners and instructors have a shared language in common, the potential for enriching the literacy learning experiences of the learners increases. ASL as a shared natural language builds on the potential for learners to be linked together within a community (Enns, 2009; Novodvorski, 2008). In their interviews, the learners in the Deaf LBS program expressed contentment in knowing that they were able to truly communicate with the instructors and other learners in learning settings. Similar results were found in a provincial study where learners felt that they benefited more from the learning experience when the teacher could do sign language compared to attending classes where an interpreter was present, which deterred from the learning experience (CSCAU, 2006). A shared language provided the learners with a sense of security

and confidence, knowing that they were a part of a close-knit community who truly appreciated the language for what it is. ASL was used both as a practice and tool to build on the learners' English literacy proficiency. ASL as a shared language allowed for the existence of comprehensible and efficient communication in the classroom, and therefore, it was integral to the development of English literacy proficiency (Bailes, 2001). Implementing ASL as the primary language of communication in deaf literacy classes emphasized the linguistic and cultural differences between ASL and English as languages, as seen in the findings of the research study. Enns (2009) found that having when deaf learners have a shared language in common, it provided them with extensive access to the educational curriculum that they would not have otherwise if ASL was not present. A shared communication system creates "true, meaningful dialogue" as they are all Deaf people learning together (Enns, 2009, p. 16). Without the presence of a shared language, the literacy learning experience cannot be valued and therefore becomes reduced to a simple experience.

Deaf literacy learners think, breath, and see ASL, not English. Consequently, it is essential to consider ASL as a type of literacy because it is a visual and expressive language. ASL embodies the worldview of Deaf people and tightens the bond that is so characteristic of the Deaf community. Therefore, its linguistic capabilities provide deaf learners with opportunities to communicate and reflect on their literacy learning experiences with other people who share the same language. The use of ASL as a shared language is a valuable socio-cultural element that contributes to the literacy learning experiences of deaf and hard of hearing learners who are enrolled in the Deaf LBS program.

***Role of instructors.*** The instructors of the Deaf LBS program were seen as mentors, guiders and most importantly of all, members of a community of practice. The instructors provided a safe haven to many of the learners, a sense of security and in addition, provided the learners with the confidence to navigate the hearing world. The instructors had familiarity with the history, culture and language of Deaf people in which they foster cultural and linguistic awareness among the community.

In the literacy learning settings, the instructors used a variety of teaching approaches to best meet the learning needs of the learners. The strategies were largely visual and expressive in nature with the use of technology, charades, real life objects, story-telling and connections to the daily events of the learners' lives. The maintenance of a community of practice relied on the role of the instructor to create learning opportunities in which learners shared their experiences with each other using dialogue, cultural tools, resources and personal motivations. A study by Taylor et al. (2007) showed that classroom leadership styles by instructors in adult literacy classrooms influenced the socialization among learners as well as literacy teaching strategies. It is important for teachers to have their own defining set of teaching philosophies, which can create supportive learning environments (Pratt, 2002).

In the interviews with the learners, many learners spoke of how their instructors influenced their overall learning in the different learning settings. According to most of the learners, the instructors were responsible for the on-going learning, not the learners themselves. The instructors structured the school day in which learning will occur. The instructors provided various teaching strategies to reach out to all the learners in the classroom. Learning was connected with real world concepts and activities that connected with the learners. Positive feedback and praise were regular occurrences in the learning settings. They also had a good

sense of humour and encouraged learners to share their daily experiences with other learners in the classroom. They set expectations for the learners to follow and taught them how to behave within the Deaf community and outside in the hearing world. Finally, the instructors were seen as role models that the deaf learners could look up to.

The relationship between an instructor and a learner can be a determinant of a literacy program's success. Interpersonal relationships between learners and instructors within adult literacy learning settings can provide both parties with opportunities to create meaning out of their experiences (Terry, 2006). Swanson (2003) argued that the instructors had great responsibility to their learners in which they created culturally-sensitive learning environments that *motivated* the learners to develop their literacy proficiencies. The learners rely on instructors to provide a respectful safe environment where expectations are realistic and true to the learners' literacy potential (Cambourne, 1995). Without meaningful dialogue among instructors and learners, the acts of knowing and learning struggle to co-exist in the learning setting (Tharp & Gallimore, 1988).

*New literacy practices.* Within the Deaf LBS program's literacy learning settings, new literacy practices emerged from the findings and their interpretations. The LBS program traditionally takes on a functional approach to literacy but the situated nature of the Deaf LBS program enabled learners to create new literacy practices that can also be considered social practices. Learning is in the experience and not simply learning from the experience (Wilson, 1993). These literacy practices became ingrained in the everyday lives of the learners who utilized these practices, for both personal and professional reasons.

The LBS 1 and LBS 2 classes focused on content that were directly related to real world concepts such as public transportation and nutrition. Learners discussed issues revolving around

public transportation in relation to reading bus signs, paying the correct fare and filing complaints and following through on these complaints. In the nutrition unit of the LBS 1 and LBS 2 classes, learners focused on how to read food labels to distinguish what could be constituted as good nutrition and bad nutrition. These topics were supported with the use of actual food items, trips to the grocery store, newspaper articles on public transportation and learning how to write a petition to file a complaint.

The Quilting module enabled learners to use numeracy and literacy in new ways that were connected to real life experiences. The tasks and activities were practical and had a cultural fit to the domains of life. The WHMIS module showed learners that the workplace was a new literacy practice in the notion that the materials and tools they worked with on a daily basis could be considered literacy. Yellow safety sandwich boards, hazard symbols, labels on cleaning products and material safety data sheets were all new literacy practices to the learners. Learners in the Computers with Seniors module were introduced to both Microsoft Excel and Microsoft Word to create letters, budget sheets and organized lists for personal and professional reasons. Personal support workers were found in the same building that housed the Deaf LBS program. Within the Pre-PSW modules, the learners built on their health sciences knowledge with the use of field trips to the Ontario Science Centre and a long-term care centre.

The development of new literacy practices within the Deaf LBS program were encouraged through the four elements of situated learning – content, context, community and participation. Through an interactionist socio-cultural approach in which literacy development is mediated through social interactions, literacy became *practices* instead of *skills*. The choosing of content, the set-up of the learning environment, the values that the learners placed on their learning, the formation of communities and the extent to which learners participated in their

practices – were all factors in the development of new literacy practices. Literacy learning was facilitated through the supportive and collaborative nature of the group in which participation was integral to the success of the group.

The transformation of skills into practices relies on the notion that “literacy becomes the ability to use language forms appropriate to the social contexts” (Evans, 2004, p. 18). Reading and writing tasks are no longer seen as discrete skills. They become embedded into social practices that allow learners to become literate in non-traditional ways (Carter, 2006). Literacy becomes shaped according to the practices in which it exists and valued in ways that learners find appropriate. Therefore, the formation of new literacy practices within the Deaf LBS program added tremendous value to the socio-cultural theory of learning because it showcased literacy in a way that made learning real and applicable to the lived experience of the learners themselves. The development of new literacy practices further supported literacy being a social practice in addition to critical, functional and cultural perspectives.

***Personal development.*** The lived experiences of the deaf and hard of hearing learners who were enrolled in the Deaf LBS program were shaped by their participation within the program and the discrete learning settings. Learners felt more empowered and confident in themselves, not only as deaf literacy learners, but as deaf adults. Although many learners reported an increase in their self-esteem and confidence levels, only a few learners connected their experiences *within* the program to their literate identities *outside* of the program. As I show below, the more embedded the learner into the community of practice, the more likely he or she will be able to reflect deeply on his or her journey as a deaf literacy learner.

In the Quilting module, learners took initiative to construct their learning around their goals. One learner wanted to learn how to use a sewing machine for personal reasons. Another

learner already had a good knowledge base about sewing but wanted to connect sewing with English literacy so the learning of vocabulary words associated with sewing became a goal. A different learner focused more on numeracy and another learner simply took the module on recommendation of the program manager and found it to be enjoyable. In the WHMIS module, some learners demonstrated more confidence in their abilities to be productive employees within their work placements when they developed more awareness of safety guidelines and principles. The learners in the Computers with Seniors module felt that learning how to use a computer would alleviate some of their stress such as hand-written attempts at letters, budget items and memos. LBS 1 and LBS 2 learners placed an emphasis on upgrading their English literacy skills for personal and professional reasons and found that the learning and teaching within the community contributed to their success in the program.

A Canadian study by Enns (2009) determined that in similar programs, deaf adults who become empowered as learners shifted from doing activities for the teacher to doing things for themselves. When learning became real in its content and contexts, the learners were more likely to participate within a community and contributed more to the learning environment. The learners' literate identities as deaf adult learners became more refined as they integrated into the community. Therefore, the learners became unrealized proponents of the social theory of literacy in which learning takes into account belonging, doing, becoming and the experience itself (Wenger, 1998).

**Answering the secondary research question.** The secondary research question of the study "What are the barriers encountered by the deaf adult learners, deaf newcomer adult learners and instructors in the Deaf Literacy and Basic Skills program?" will bring out the views of the learners and instructors themselves in response to issues surrounding deaf literacy

learning. The barriers experienced by the learners and instructors themselves may provide new insight in how literacy learning is a struggle for many deaf learners. The emergence of barriers came from the analysis of a single data source, which was the reflective journal. There was no direct data supporting the secondary research question and therefore, it has been addressed through the interpretation of the reflective journal as well as the overall analysis of the study.

*Materials to support literacy learning.* It was clearly evident that the findings of the research study showed that deaf literacy learning was best supplemented when there were sufficient materials that were connected to real world concepts and events. Materials needed to be relevant, visually stimulating and context should be applicable to what was being taught (Enns, 2009). Informal conversations with instructors revealed that the use of curriculums and prescribed materials do not necessarily reflect the learning needs of the deaf learners. According to the instructors in the Deaf LBS program, the resources had to be easily adapted to fit the context of deaf literacy learning and that was time-consuming. Some of the instructors in the Deaf LBS program commented that they will usually modify existing resources in order to meet the needs of the learners.

In literacy programs across Ontario, there are standardized workbooks and supplementary resources that can be of use in adult literacy programs. Deaf Literacy Initiative published a document in 2003 that brought together deaf literacy practitioners to have them share their views on a number of issues pertaining to deaf literacy, one of which was the use of teaching materials. Among some of the comments published in the study were:

We prefer to develop or modify our own resources because most of the available resources use words that are very complex (p. 26).

What we really need is a resource that is a one-stop shop. We have access to resources but most of these resources were made for the Anglophone stream. These resources are not beneficial for our stream because the English is too complex for our learners (pp. 26-27).

Therefore, it is clear that it is not only the instructors of the Deaf LBS program that are currently experiencing this issue. The findings of the study showed that there was lack of physical material to support deaf literacy learning and budgetary concerns was a primary reason. The instructors in the study often used whatever resources that was available to them – charades, visual pictures on the whiteboard, the Internet and field trips – in order to facilitate literacy learning. In conclusion, there is a great need for the development of physical materials to support deaf literacy learning in order to alleviate stress faced by the instructors in the Deaf LBS program.

***Bridge between ASL and English.*** Many of the learners in the study commented on the difficulties they encountered when working with two different languages in the Deaf LBS program. In order to become fluent in English, deaf learners must be able to navigate the complexities of both languages in terms of linguistic and grammatical structure (Bochner & Bochner, 2009; Livingston, 1997). Word order in terms of subject, verbs and objects differ between the two languages. Instructors must provide context that can facilitate a naturalized approach to literacy development and that means having the learners recognize the difference between the two languages (Enns, 2009).

For most of the learners in the Deaf LBS program, their primary goal was to upgrade their English literacy skills for both personal and professional reasons. The Deaf LBS program focused on learners who were in the two lowest levels of literacy (LBS 1 and LBS 2) according

to MTCU. Some of the learners have recognized that their journey to achieving their desire level of English literacy may be longer than they expected and they will still continue work towards that. Other learners were simply content with their progress and do not appear to be deterred if their progress is not improving as much as they would have liked to. In my reflective journal, it was apparent that the learners felt that their level of English literacy skills hindered them in achieving their goals such as moving on to post-secondary education or obtaining employment.

The instructors in the Deaf LBS program fully recognized the language barrier that many of the learners in the Deaf LBS program face on a daily basis. Continued guidance and motivation were part of the key communication strategies that the instructors used to encourage the learners to work on their literacy development (Swanson, 2003). It is evident that deaf literacy learners experience real-life barriers in using functional literacy within the greater context of society. To assuage this barrier, emphasis needs to be placed on recognizing the linguistic needs of the deaf individual and *accommodating* these needs rather than having the individual *conform* to the norms of society. There is a clear need to build on the potential of deaf literacy learners and move them away from a functional level of literacy and more towards a culturally-sensitive model that enable them to interact with text in meaningful ways (Enns, 2009).

*Negotiating with identities.* For a deaf person to understand the complexities of deaf literacy, he or she must negotiate with his or her identity to fully recognize the potential of this subject. This can be constituted as a barrier because in order to be considered *literate* in all aspects, a person must recognize his or her strengths as a learner – from physical and non-physical contexts. Literacy can help individuals “to define an aspect of their social ident[ies]” (Brewster, 2004, p. 50). A study by McCarthey (2001) found that learners who were able to

perceive their own literacy abilities as well as understanding the perceptions of others (e.g. parents, teachers) influenced their identities. The negotiation of identities could be placed on a continuum, in which learners ranged from not being able to assess themselves as deaf literacy learners to those individuals who were able to identify themselves as a *deaf* literacy learners compared to those who are hearing. Learners who begin to negotiate with their identities can further contribute to the socio-cultural theory of learning within the situated cognition framework.

In the research study, several learners were negotiating their identities. Marc was working towards becoming a teacher's assistant for deaf learners and Xavier wanted a job as a resident counsellor in a school for the deaf. Both Marc and Xavier recognized that in order to pursue these employment opportunities, their literacy skills need to match that of the job descriptions. They were aware of their own literacy needs and had enough determination to make these opportunities realistic. Marc and Xavier were negotiating their identities of being deaf literacy learners as they knew their current literacy levels and the amount of work it would take for them to reach their goals.

Timothy, who was currently retired, exemplified the issue in deaf literacy learning, especially those who were newcomers to Canada. In his interview, he spoke about organizations and programs needing to recognize the difference between hearing newcomer adults and deaf newcomer adults. According to Timothy, he felt that deaf newcomer adults struggled more because they have less access to the English language as it is both spoken and written. Timothy had fully identified himself as a deaf literacy learner and it may be due from experience that he had little difficulty negotiating his identity compared to the other learners in the program. Therefore, it is important for deaf literacy programs to have learners set realistic goals and

expectations of their learning in order for them to negotiate with their literate identities successfully.

### **Contributions to Research, Practice and Policy**

The findings of this research study have implications for research, practice and policy in relation to how a socio-cultural perspective can be used to describe adult deaf literacy learning.

**Contributions to research.** The context of the research study allowed issues that surround adult deaf literacy within a socio-cultural lens to emerge from the findings.

Consequently, the roles of interactionism, social literacy, situated learning and communities of practice all contributed to the shaping of literacy learning experiences of the deaf and hard of hearing learners that participated in this study. Moreover, the research study's findings had research applications that deepened our understanding of deaf literacy.

*Using an interactionist view to explore adult deaf literacy learning.* The use of an interactionist socio-cultural approach can be used to expand our understanding of adult deaf literacy learning. John-Steiner et al. (1994) proposed that an interactionist view considers learning to occur in conjunction with social interaction as a means of language development. There were very few scholarly articles that discussed the use of the interactionist approach in the field of deaf literacy (e.g. Wilcox, 1994). In Wilcox's (1994) study, the interactionist view was melded with the theories of both situated learning and situated cognition to provide a detailed picture of how various socio-cultural elements contributed to the lived experiences of deaf and hard of hearing learners. Until now, there had been no analysis using the interactionist approach in adult deaf literacy. The interactionist approach helped to clearly define how social interactions facilitated the literacy learning of deaf and hard of hearing adults. Subsequently, the research

study supported the use of the socio-cultural theory of learning within the realm of adult literacy education as well as deaf adult literacy education.

*Supporting literacy as a social practice.* The findings of the study have great potential to support the social theory of literacy in which literacy can be seen as situated in practices. It is now possible to examine the realm of adult literacy learning through social and cultural lens where meaning is drawn from ordinary events and practices (Taylor & Blunt, 2001). The interpersonal interactions between the instructors and learners and among learners themselves clearly played a part in creating a community vibe within the Deaf LBS program. Deaf learners rely on these interpersonal interactions to make meaning out of their experiences as literacy learners. Without the social aspect of literacy, learning struggles to exist. Barton and Hamilton's (2000a) social theory of literacy proposed that it is within these interactions that literacy plays a vital role. Literacy can exist in different domains of life – home, school, workplace and the community – all of which are valued differently by the learners themselves (Barton, 2007). Therefore, literacy is shaped by the experience it is set and reliant on social and cultural factors.

Within the Deaf LBS program, the Deaf culture was integrated in every aspect of the program, whether it's through schooling, community events or social networking. A contributing factor to the social theory of literacy is that the Deaf LBS program encouraged the teaching of social learning behaviours, collaboration, feedback and group support. Similar findings from a study by Taylor et al. (2003) showed that all these traits were important literacy practices and can provide insight into adult literacy learning within different social and cultural contexts. Learners became responsible for their own learning experiences and began to see how these literacy practices were connected to their personal and professional goals. Additionally, the

learners became more empowered as deaf literacy learners and achieved a greater understanding of what it meant to be part of a Deaf learning community.

The study's results demonstrate that social literacy strengthens the potential for literacy programs to become communities of practice. Literacy becomes realized in the idea that it is "something one actively does" (Barlett, 2007, p.53) through interactions with textual and non-textual worlds. Further research on the role of social literacy within deaf literacy programs can provide insights on how the programs' socio-cultural components contribute to the literacy development of deaf and hard of hearing learners. If programs moved towards a social view of literacy while encompassing the socio-cultural elements that contribute to the learning, then there may be differences in literacy levels compared to programs who utilize a functional view of literacy.

***Role of situated learning in deaf literacy programs.*** Situated learning was found to be a contributing factor to the literacy learning experiences of the deaf and hard of hearing learners in the Deaf LBS program. Stein's (1998) four elements – content, context, community, and participation – were all found to exist within the Deaf LBS program. Each element of situated learning varied considerably between learning settings. The research study's findings suggested that the literacy learning settings contributed to the success of the Deaf LBS program as it has evolved to become a distinct community of practice.

It could be clearly assessed that each of the literacy learning settings could be considered as communities of practices. The learning settings were culturally sensitive and had a social aspect to how learning goes on in each setting. The learners were present in the notion that they contributed to the setting in their own manner, whether it was through their learning goals, their degree of participation, their mutual respect or their devotion to the Deaf LBS program. The

study found that all six literacy learning settings could be constituted as distinct communities of practice, regardless of a teacher-centred approach or a learner-centred approach. A culturally-sensitive approach to situated learning needed to be addressed when applying the framework to linguistic minority groups. Secondly, the situated learning framework was difficult to apply when considering the personal experiences and reflections of the learners who were part of the study in relation to their learning to be potential socio-cultural learning factors. Many of the learners wished to upgrade their literacy skills for both employment and independent living. For some learners, situated learning did not fully enable them to explore their roles as *learners* within the Deaf LBS program as many learners simply saw themselves as deaf adults being a part of a *community*.

Within the contexts of this research study, the situated learning framework may have fared better if the framework was integrated with a second socio-cultural framework such as Wenger's (1998) social theory of learning or collaborative learning (Rogoff, 1995; Taylor et al. 2003; Taylor et al. 2007). The social theory of learning considers learning to have four elements in which learning is seen to be the belonging, the doing, the becoming and finally, the experience in which the learner is situated within (Wenger, 1998). Collaborative learning focuses on the cognitive development of learners through interactions with other learners in a defined community of practice (Rogoff, 1995). Further research over a longer period of time is needed to investigate the situated nature of discrete learning setting in order to provide a clearer understanding of how participation can be drawn upon to establish communities of practices.

*Expanding our understanding of communities of practices.* According to Wenger (1998, 2007), communities of practices are organized groups of people with a shared purpose of what is to be learned and achieved. There are three elements that help define a community of

practice: mutual engagement, joint enterprise and a shared repertoire. The findings of the research study indicated that there were discrete communities of practices of varying degrees within the Deaf LBS program. The amalgamation of the individual communities of practice created a larger community of practice that encompassed the socio-cultural view of learning – the Deaf LBS program itself. Communities of practice have the potential to move towards becoming highly structured learning communities where members can further develop their identities (Skerrett, 2010). Moreover, social roles and identities can be constructed in relation through integral participation within the communities of practices (Warriner, 2010). Further research is needed to explore the exact socio-cultural elements and patterns that make up the communities of practice in order to explain deaf literacy at a specialized level. This can then lead to a richer understanding of how communities of practice shape the literacy learning experiences of the deaf and hard of hearing learners. The identification of the specific socio-cultural elements and patterns within individual literacy learning contexts can contribute to our knowledge of communities of practices in deaf literacy learning environments.

*Theoretical intricacies of deaf literacy.* As described in Chapter 2, Figure 1 illustrated the conceptual context of the research study. The findings of the study closely aligned with the theoretical components of Figure 1. It was clear that a shared language (ASL) enhanced the development of English literacy skills and practices as a common language contributed to the positivity of the learning environment. The bonds between the learners and instructors were evident through the mutual respect, compassion and spirit, all of which contributed to the positive learning environment of the Deaf LBS programs and its individual learning settings. Teaching and learning strategies were modified to accommodate the needs of the learners and within the contexts of the learning setting. The study was primarily guided by Stein's (1998)

examination of situated learning, which revealed numerous socio-cultural elements that contributed to the lived experiences of the deaf and hard of hearing learners enrolled in the Deaf LBS program. From a theoretical perspective, situated cognition did not play a strong role in establishing the socio-cultural nature of deaf literacy learning within the Deaf LBS program. In conclusion, each component of Figure 1 interacted and intersected with each other to provide us with a vivid and rich picture of how deaf literacy learning occurs within the field of adult education. The theories of situated cognition and situated learning extended themselves to the literacy development of deaf literacy learners through the use of ASL as a shared language. This was mediated through a caring, supportive learning environment in which was framed by the instructors and learners themselves as part of communities of practices.

**Contributions to practice.** The study's findings clearly defined the importance of the role of communities of practices and situated learning in deaf adult literacy programs. Socio-cultural factors that contributed to the literacy learning experiences of deaf and hard of hearing adults were identified. The practical components of the study may be beneficial for practitioners as motivating factors to create awareness on the subject of deaf literacy.

***Role of new literacy practices.*** New literacy practices emerged within the literacy learning settings, all of which contributed to the socio-cultural nature of the Deaf LBS program. The literacy practices were tied to several domains of life in which literacy can exist – school, the family and home, the workplace and the greater community, all of which were seen as critical components of adult literacy education (Taylor, 2001). These four domains of literacy provided a clearer picture as to how adult education is organized and it can provide a greater understanding of how literacy learning can intersect within multiple domains.

Literacy practices play a vital role in the literacy development of deaf and hard of hearing learners. The practices acknowledge the everyday worldviews of the learners in relation to literacy and the role that literacy plays in their lives (Brewster, 2004). Learners' goals were realized through the use of literacy practices as ways of teaching and learning within the Deaf LBS program. The role of functional literacy was lessened and social literacy emerged within the learning settings. A functional approach to literacy gives the impression that literacy is commodity and those who lack basic literacy skills are seen to have deficits (Hillier, 2009). The integration of literacy practices enables literacy learning to become tied into real world connections and from this perspective, learners are more likely to achieve their short-term and long-term goals. Practitioners can benefit from this approach by connecting literacy to practical concepts in which learners can then apply to any one of the four adult education domains previously mentioned. Literacy practices are meaningful and carry value as they are not measurable and standardized by any means compared to functional literacy skills such as reading and writing.

The integration of literacy practices within adult literacy programs is dependent upon two factors as based from the findings of this research study. Firstly, the role of practices must be closely aligned with the personal and professional goals of the learners, which are related to the four domains of literacy as identified by Taylor (2001). For example, if learners wish to seek employment, an example of a beneficial literacy practice could be the writing of a resume or the development of a portfolio. These practices take into consideration the personal development of the learners themselves and allows for valuable input. Secondly, the use of literacy practices must be supported by both the practitioners and learners themselves. Without a shared goal and objective for learning, literacy practices struggle to exist. In conclusion, literacy practice as a tool

for literacy development offers great potential for learning to be situated within a socio-cultural perspective. This further enriches the literacy learning experiences of the learners themselves and may possibly lead to greater rates of participation within adult education programs.

***Differentiation in teaching and learning strategies.*** Specialized literacy programs that provide services to deaf and hard of hearing adults differ significantly from general literacy programs in the way learning is to be structured. Compared to hearing adults, culturally deaf adults have to negotiate between two strikingly different languages (ASL and English) as part of their literacy development (Livingston, 1997). The development of English literacy skills for deaf adults requires them to carry out additional translation skills because the linguistic structures of ASL and English are not the same. Therefore, teaching and learning strategies within deaf literacy programs need to be differentiated and accommodated to best fit the needs of the deaf learners.

The findings of the research study yielded possible contributions to the program development component of deaf literacy. Emphasis on visual learning draws on the visual-gestural nature of ASL as a language. Deaf learners are very observant and thrive in a visually-stimulating learning environment. The use of pictures, charades, movies, field trips and technology were contributing factors to the literacy development of deaf and hard of hearing learners from a socio-cultural perspective. Visual information lessens the burden that many deaf learners encounter when learning English as a second language. According to Enns (2009), teaching should be “structured to build on the rich life experiences and general world knowledge of students” (p. 9). Therefore, learners are more likely to connect with information if it is relatable to them in either direct or indirect manners.

In the research study, many of the learners were immigrants from non-English speaking countries. Some of the learners had little to no formal education and most of them attended schools for the deaf in their own home countries. It was important for the instructors to make the learning environment comfortable and safe for the learners as it was a relatively new experience for many of the learners. Instructors must utilize a variety of teaching strategies to engage the learners within the community of practice in which the language, technology, skills and practices interconnect with each other in the learning setting (Ramsey & Padden, 1998). By structuring the teaching to focus on what the learners know, learning then becomes productive and meaningful. This will then lead to the learners contributing more to the learning setting through active participation.

*Emphasis on the well-being of the learners.* A key finding to this research study was how integral the Deaf LBS program was to the development of a learner's personal identity, both as a deaf learner and as a deaf adult. The supportive nature of the Deaf LBS program facilitated trust, respect and genuine compassion towards one another within the learning settings and in the greater community within the Deaf LBS program. Therefore, emphasis on the well-being and personal development of the learners enrolled in literacy programs were contributing factors to their success in literacy programs.

Based on the findings of the study, when learners gained confidence through their learning experiences in literacy programs, they were more likely to resonate with their personal and professional goals and connect them to their learning experiences. Enns (2009) showed that increased confidence levels enabled learners to identify areas of personal development for further improvement, which reflected their abilities to reflect on their own experiences. Learners who lack confidence in their ability to negotiate the role of literacy in their lives may not have come

to terms with their identities as disabled adult learners. A study by Brewster (2004) found that literacy helped learners identify components of their social identity that contributed to their success in literacy programs.

Praise, positive feedback, reflection and sharing of ideas enabled learners to make meaning of their experiences in literacy programs. All of these factors aided learners in recognizing their strengths and weaknesses as literacy learners. From a socio-cultural perspective, practitioners in deaf literacy programs need to recognize that connecting literacy activities to the personal development of deaf learners yield rewarding results. The learners become more involved in their own learning experiences and take responsibility for what they learn, how they learn and how to apply it in other contexts.

**Contributions to policy.** The findings of the 1994 IALS and 2003 IALSS led to a significant increase in the number of adult literacy programs offered across Canada to close the gap between theory and practice in relation to the literacy, education and the economics of Canadian society. Within the province of Ontario, the creation of the LBS program addressed many of these needs to a certain extent through its four literacy streams: Anglophone, Francophone, Aboriginal and the Deaf. It is important for policy makers to recognize the differences between the four literacy streams and recognize how to provide culturally-sensitive literacy services to deaf and hard of hearing Canadians.

***Moving towards a socio-cultural perspective of literacy.*** Proliferation in deaf literacy levels depends on how literacy is defined within the literacy programs that do offer these services. Literacy programs that are situated within a functional perspective will find themselves struggling to offer adequate services to deaf learners. Most LBS programs operate from a functional perspective and see literacy as a set of *skills* rather than *practices*. For deaf literacy to

flourish, a call needs to be made in order to move the focus of literacy from a functional perspective to an encompassing socio-cultural perspective. Deaf LBS programs should consider modifying their own programs compared to regular LBS program as to best fit the needs of the deaf learners. Furthermore, LBS programs should take into consideration the integration of social literacy, or literacy as practices, as part of its curricular and program development. This will provide more equitable opportunities and lessen the burden on learners struggling to fit in the norms of society.

Policy makers should not defer to national surveys on literacy in which the definition of literacy has become one-sided and biased. The IALS and IALSS provided a clearer picture of the literacy levels of Canadian adults but only within one set definition in which literacy was seen as a commodity and adults did who not meet standards were not rewarded by society. Therefore, policy makers need to recognize the role of multiliteracies in which literacy is shaped according to the social and cultural contexts it is situated within. The IALS and IALSS do not determine whether an individual is literate or illiterate. All individuals are literate in their own ways, whether it is from a functional, critical, cultural or social perspective. For deaf adults, they *are* literate. To deaf adults, literacy means being able to communicate with other individuals using a shared language and being able to make meaning of one's experience in these contexts. The Deaf community's definition of literacy simply differs with the norm and it is essential that policy makers include this notion when considering changes and implementations in deaf literacy programs.

***Increased funding and awareness for deaf literacy programs.*** Deaf literacy is a complexity in itself. Its own definition of literacy does not match that of the greater Canadian society. More funding and awareness on the subject of deaf literacy must be encouraged in order

to promote a greater understanding of the socio-cultural nature of deaf literacy. As there are only 14 out of 300 LBS programs providing literacy services to the deaf and hard of hearing communities in Ontario, there is a great need for increased funding to create new programs. If funding is to be provided by MTCU, there needs to be learners readily available to enrol in these programs. However, many deaf learners who wish to upgrade their literacy proficiency may not be able to access these programs due to their proximities. An even distribution of Deaf LBS programs across the province of Ontario in both rural and metropolitan areas can generate interest and further potential to create more Deaf LBS programs.

Based on the findings of the research study, many of the learners in the Deaf LBS program were immigrants to Canada from non-English speaking countries. Most of them arrived to Canada with little to no knowledge of English, French or ASL. Cross-partnerships between immigration organizations, community partners, schools, disability organizations and government branches can increase awareness of services can be offered to deaf immigrants. Moreover, partnerships between all LBS programs, regardless of their streams, can ensure that learners are placed in the right program that can accommodate all their learning needs for success in life. Policy makers have a responsibility to deaf adults and ensuring that there are equitable opportunities for deaf adults to have access to literacy services within a barrier-free environment.

### **Limitations of the Study**

In this section, the limitations of the study will be discussed, namely the issues of trustworthiness and transferability. The findings of this research study may be transferable to adult literacy programs that provide specialized services for Canadian deaf and hard of hearing adults.

**Trustworthiness.** To ensure the trustworthiness of the research study, all data sources were triangulated to verify the repeatability of the findings and their interpretations. Themes that emerged from the one source of data were confirmed with other sources of data. The interviews with the learners yielded mostly similar accounts of their experiences as deaf adult learners at the Deaf LBS program. Consequently, as the study aimed to focus on the views of the deaf learners themselves, it was important to include any differing views shared by learners that were not of the general consensus, as to prevent bias.

**Member checking.** In my original research proposal, I included the use of member checking to be part of the trustworthiness process. Member checking requires participants to review their individual interview narratives to verify the interpretation and accuracy of the data. An interview narrative was created for each participant that was interviewed, which were eight in total, and sent to the program manager of the Deaf LBS program for member checking. Several emails were sent back and forth to ascertain that the interview narratives had been read and further revisions to be made for the data analysis of the study to proceed. It was difficult to get the interview narratives verified and therefore, they were never returned. A possible reason may have been increased work responsibilities for the staff of the Deaf LBS program as the research study was conducted at a time when government reviews of the Deaf LBS program were ongoing. It remains to be said whether the interview narratives were verified or not. If the interview narratives had been verified by the participants, the findings and their interpretations could have added more credibility to the research study.

**Integrity of ASL-English translation.** The majority of the data accumulated during the data collection period required the use of both an ASL interpreter and a computerized notetaker. Due to my limited fluency in sign language and my profound hearing loss, I required extensive

interpretation services to ensure that I was able to understand the dialogue within the Deaf LBS program. In both the observation and interview sessions, an ASL interpreter would translate the sign language into verbal dialogue, in which my computerized notetaker would transcribe onto a laptop for me as a means of conveying information. Therefore, all transcripts were heavily dependent on the ASL interpreter's interpretation of information. In the interview sessions, one of the ASL interpreters was concerned with the quality of her work in relation to the dialogue between her and the learner. Some of the learners, especially those who do not have strong fluency in ASL, struggled with providing answers. In some cases, the learners misinterpreted the question and provided completely different answers that had no relation to the original question. When this occurred, the ASL interpreter had to re-word the interview question to make it clearer for the learner to understand. There have been questions about whether this affects the credibility of the research study in terms of the findings and its interpretations. Further investigations into research practices as such could lead to significant potential in improving research capacity within the contexts of deaf literacy.

**Issues in cultural differences.** In this research study, it was important to recognize my role as an orally deaf researcher who was raised in a hearing world from social, cultural and educational perspectives. Many of the deaf learners who were participants in the research study come from distinct cultural backgrounds and have identified themselves to be part of the Deaf world. There were cultural and linguistic barriers between the participants and myself as the researcher. Although my views on deaf literacy remained neutral for the duration of the study, it was possible that these barriers had influenced the outcome of the data that was collected. If I was a culturally Deaf researcher, I may have collected data that provided more insight into the complexities of deaf literacy from a socio-cultural perspective. For example, in observational

sessions, I could have possibly collected data on how learners negotiated with the learning materials on their own as some of the learners tended to sign to themselves as a way of thinking out loud. It was not possible for the ASL interpreter to provide me with all the dialogue that occurred during this phase of the study but it could have added another layer to the findings of the study.

**Transferability.** This research study provided a picture of how socio-cultural elements contributed to the literacy learning experiences of deaf and hard of hearing learners in a Deaf LBS program. It is important to acknowledge that the results of this study and their interpretations are limited to the contexts of which the study was situated in, namely the Deaf LBS program in southern Ontario. Deaf communities tend to differ significantly in terms of the norms, values and social context in different parts of the country as well as globally. Furthermore, there are different types of Deaf LBS programs in Ontario. Some Deaf LBS programs are geared towards deaf-blind adults. Other Deaf LBS programs have different pathways of literacy: academic upgrading, employment and independent living. If a similar study was to be conducted in another Deaf LBS program, regardless of its focus, the results may be considerably different. However, the findings of the research study may apply to other similar case studies on deaf literacy programs as it may facilitate the sharing of ideas, strategies and knowledge between practitioners, researchers and policy makers. The rich description of this research case study may create opportunities for comparisons with other similar case studies.

### **Concluding Thoughts**

Stein's (1998) examination of situated learning within adult education contexts provided an explanation of how socio-cultural elements contributed to the lived experiences of deaf and hard of hearing learners in a Deaf LBS program. The situated learning framework showed that the distinct literacy learning settings could come together to form a greater community of practice, which was the Deaf LBS program itself where learners and program staff harmoniously worked together in social and cultural contexts. Emphasis was placed on literacy learning being a set of practices instead of skills. Literacy became meaningful to learners when they chose to use these practices as contributing elements to their personal development of deaf literacy learners.

Four themes were identified during the course of the research study, all of which contributed to the socio-cultural nature of the Deaf LBS program and the literacy learning experiences of the deaf and hard of hearing learners. ASL as a shared language allowed learners to engage in new literacy practices in which meaning can be construed from. The role of the instructors in the Deaf LBS program paved the pathway for learners to reflect on their personal journeys and development as deaf literacy learners. These findings provide an initial suggestion that socio-cultural elements are integral to the success of deaf literacy programs. Analysis of a reflective journal revealed that there were underlying barriers that played a part in the lived experiences of the learners and instructors in the Deaf LBS program. The use of learning materials, ASL-English language difficulties and the negotiation of identities emerged as barriers from the analysis of the journal.

The situated learning framework showed that communities of practices play a part in the success of the Deaf LBS program in the research study. For deaf people, without communities of practices, participation became limited and learning ceased to exist. Therefore, literacy was re-

conceptualized according to the social and cultural contexts in which it was situated. The use of situated learning and social learning theories expanded our understanding of deaf adult literacy within a socio-cultural perspective. Practitioners may consider the findings of the study to be beneficial to their literacy programs in order to promote a social view of literacy. A social view of literacy can increase participation rates, connect literacy practices to personal experiences and further enrich the literacy learning experiences of adult learners alike. Finally, policy makers can use the findings of the study as a call for attention for greater awareness and funding opportunities for deaf literacy programs in Canada.

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**Appendix A. Letter of Permission from Deaf LBS Program**

February 5, 2010

Meagan Roberts

Dear Meagan:

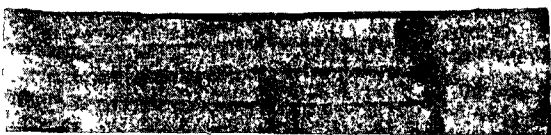
Thank you for your e-mails and letters. Your request to conduct graduate-level research within the Literacy and Basic Skills Program at the Deaf here in [redacted] Ontario has been considered. [redacted]

This will be more experience to have you do a research on our program and with your learning experiences with the deaf learners in the literacy program. It will be a good challenge of learning what our instructors teach to our learners. I hope that your research is what you will be expecting.

This letter grants you permission to carry ahead with your research here at [redacted]  
[redacted]

If you have any questions or need any other documents, please do not hesitate to contact me and I will address your questions or concerns.

Sincerely yours,



Manager  
Adult Education Program

### Appendix B. Ethics Approval from the University of Ottawa

File Number: 12-09-21

Date (mm/dd/yyyy) 02/12/2010



Université d'Ottawa / University of Ottawa  
Service de subventions de recherche et deontologie / Research Grants and Ethics Services

### Ethics Approval Notice

### Social Science and Humanities REB

#### Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Maurice	Taylor	Education / Education	Supervisor
Meagan	Roberts	Education / Education	Student Researcher

File Number: 12-09-21

Type of Project: Master's Thesis

Title: A Case Study of Adult Deaf Learners Literacy Practices through a Socio-cultural Lens

<u>Approval Date (mm/dd/yyyy)</u>	<u>Expiry Date (mm/dd/yyyy)</u>	<u>Approval Type</u>
02/12/2010	02/11/2011	Ia

(Ia: Approval, Ib: Approval for initial stage only)

#### Special Conditions / Comments:



File Number: 12-09-21

Date (mm/dd/yyyy): 02/12/2010



Université d'Ottawa University of Ottawa  
Service de subventions de recherche et déontologie Research Grants and Ethics Services

This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement and other applicable laws and regulations in Ontario, has examined and approved the application for ethical approval for the above named research project as of the Ethics Approval Date indicated for the period above and subject to the conditions listed the section above entitled "Special Conditions / Comments".

During the course of the study the protocol may not be modified without prior written approval from the REB except when necessary to remove subjects from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the study (e.g. change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, information/consent documentation, and/or recruitment documentation, should be submitted to this office for approval using the "Modification to research project" form available at: [http://www.rges.uottawa.ca/ethics/application\\_dwn.asp](http://www.rges.uottawa.ca/ethics/application_dwn.asp)

Please submit an annual status report to the Protocol Officer 4 weeks before the above-referenced expiry date to either close the file or request a renewal of ethics approval. This document can be found at: [http://www.rges.uottawa.ca/ethics/application\\_dwn.asp](http://www.rges.uottawa.ca/ethics/application_dwn.asp)

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5841 or by e-mail at: [ethics@uOttawa.ca](mailto:ethics@uOttawa.ca).

**Signature:**

Catherine Paquet  
Assistant Director (Ethics)  
For Barbara Graves  
Chair of the SSH REB

### Appendix C. Learner Consent Form

**Researcher:** Meagan Roberts, MA Student  
Faculty of Education, University of Ottawa.

My name is Meagan Roberts and I am a student at the University of Ottawa. This research is part of my work as a student. I want to look at the way deaf and hard of hearing adults learn in the Literacy and Basic Skills program. The research is a chance to talk about learning and how you learn.

When research is done with other people, they must give their permission in writing by signing a consent or permission form. This research study will not harm you and you can leave the study anytime you want. The research is not a test of you, your learning, your teacher or your class.

If you agree to be part of the research, a few things will happen:

- I will observe your class for two weeks. You will be doing learning activities with your teacher and other students. I will be watching how everyone works together. You can choose to be part of the observation session or you can choose to not be part of the observation session.
- I will interview you after the observation period. The interview will be 30-45 minutes long and take place at a time and place that we agree on. You can choose to be interviewed or you can choose not to be interviewed. The interview will be audio-taped. The questions asked during the interviews will only be about the research. After the interview, I will write your interview as a story.
- If you let me interview you, you will get to read a copy of your story to make sure the information is correct. You can make any changes you want.
- I may ask to look at some of your work that you do in the classroom. You can allow me or not allow me to photocopy some of your work.

In interviews, you can choose not to answer any questions or stop the interview at any time. You do not have to show me your work. If you choose to do any of these things, nothing will happen to you or the study.

If you join the study, I will make sure that your name is not used and that your rights will be respected. A made up name will be used whenever I write about what you have told me or showed me. All the information from the study will be stored in a private location only known to me and Dr. Maurice Taylor, who is my thesis supervisor. All of this information will be kept for seven years after which paper records will be shredded and audio tapes will be physically destroyed.

If you have any questions or concerns about being a participant in this research study, you are free to contact the Protocol Office for Ethics in Research at: 550 Cumberland Street, Room 159, (613) 562-5841, or [ethics@uottawa.ca](mailto:ethics@uottawa.ca).

If you have any questions or concerns about this research project, you may contact me in person, by phone or e-mail using the contact information on the top of the first page of this consent form. If you wish to speak to my thesis supervisor, Dr. Maurice Taylor, you are free to do so at: LMX 230, Faculty of Education, University of Ottawa

There are two copies of this consent form: one for me and one for you.

- You consent to being part of the observation session.  
YES  NO
- You consent to participating in an individual interview.  
YES  NO
- You consent to allowing my work to be photocopied. Your work will not be displayed or shown to anyone. Your work will only be seen by me and my supervisor, Dr. Maurice Taylor.  
YES  NO

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Signature of Participant

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Date

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Signature of Researcher

---

Date

### Appendix D. Instructor Consent Form

**Researcher:** Meagan Roberts, MA student, Faculty of Education, University of Ottawa.  
Tel: \_\_\_\_\_ TTY available) or Email \_\_\_\_\_

I, \_\_\_\_\_, agree to participate in the research project that will be conducted by Meagan Roberts of the Faculty of Education at the University of Ottawa. The research project is under the supervision of Dr. Maurice Taylor. The purpose of the research study is to understand how adult deaf and hard of hearing learners develop their literacy skills in the Literacy and Basics Skills (LBS) program. This inquiry will also look at how particular teaching and learning strategies benefit deaf and hard of hearing adult learners in a social context. It is hoped that this study will allow learners and instructors to reflect on their own experiences in literacy program as it may lead to new insights in this field of education.

The research will take place within the Deaf Literacy and Basics Skills program. As a participant, I will be asked to be involved in the following research activities:

- Observation sessions over a period of two weeks. I will be participating in teaching-learning activities while Meagan will observe the student-student and student-instructor interactions that take place in the room.
- An interview that will take place after the observation sessions. The interview will be 30-45 minutes in length depending on whether a sign language interpreter is needed. The interview will be audio-taped. The questions asked during the interviews will be related to the topic of research.
- I can choose to be part of the observation session or I can choose to not be part of the observation session. I can choose to be interviewed or I can choose not to be interviewed.
- If I choose to be interviewed, I will read a copy of my interview narrative to make sure the information is correct.
- Allowing Meagan to look at my teaching materials and making photocopies.

The information that will be gathered from the aforementioned research activities will only be used for the purposes of the research study. As a participant, I understand that even though there are no known risks or discomforts associated with the study, I have every right to refuse participation in this study or stop participation if I feel uncomfortable in any way. I am also aware that I am free to withdraw before or after the interview or refuse to answer questions.

To ensure that confidentiality is maintained, a pseudonym will be created for any written text in the research study including the thesis and any further publications that may stem from the findings of this research study. Data collected through this study will be in the form of audio, transcripts and other notes. This collection of data will be stored securely in an off-site location, only known to Meagan and her supervisor. Audio-taped as well as all transcripts will be stored in a secure location in Dr. Taylor's office. The data will be stored in a secure manner for seven years after which paper records will be shredded and tapes will be physically destroyed.

If I have any questions or concerns about being a participant in this research study, I am free to contact the Protocol Office for Ethics in Research at: 550 Cumberland Street, Room 159, (613) 562-5841, or *ethics@uottawa.ca*.

If I have any questions or concerns about this research project, I may contact Meagan in person, by phone or e-mail using the contact information on the top of the first page of this consent form. If I wish to speak to Meagan's thesis supervisor, Dr. Maurice Taylor, I am free to do so at: LMX 230, Faculty of Education, University of Ottawa.

There are two copies of this consent form: one for me as a participant and one for Meagan Roberts.

I consent to being part of the observation session. YES  NO

I consent to participating in an individual interview. YES  NO

I consent to allowing my work to be photocopied. My work will not be displayed or shown to anyone. My work only be seen by Meagan and her supervisor, Dr. Maurice Taylor. YES  NO

---

Signature of Participant

---

Date

---

Signature of Researcher

---

Date

## **Appendix E. Observation Protocol**

### **CONTENT**

What are the topics/concepts being learned or discussed? Do the topics have relevance to the lived experiences of the learners?

Describe the materials and resources that are being used to support the learning (books, handouts, media, field trips, technological equipment)

### **COMMUNITY**

Are there strong goals for learning? Is there a clear purpose or objective for learning? Do learners and instructors differ in their goals and objectives?

Describe the social nature of the learning setting. Is the learning teacher-centred or learner-centred?

Do the community engage in meaningful practices?

How do learners demonstrate understanding?

### **CONTEXT**

Describe the physical context, which is the learning setting (classroom). What is the physical set-up? How is the seating arrangement conducted? What furnishings and decors are used? How is it connected to the learning?

Describe the non-physical context, which are the values, norms and cultures that the participants bring to the learning settings? How do learners differ from each other in valuing their learning?

How do the learners apply or value the context in other domains?

### **PARTICIPATION**

Are roles of newcomers and oldtimers established in the learning setting?

How do learners help each other? Describe problem-solving techniques, if necessary.

Are the learners' identities evolving according to their participation?

How do learners engage with their practices? Describe different levels of participation (e.g. demonstration, direct instruction, modelling).

Can legitimate peripheral participation be seen within the community?

## Appendix F. Learner Interview Guide

Name of Learner: \_\_\_\_\_

Date: \_\_\_\_\_

Location: \_\_\_\_\_

### A. INTRODUCTORY QUESTIONS

- Tell me about yourself and how that brought you here to the Deaf Literacy and Basics Skills program?
- What kind of barriers or problems you have experienced with respect to literacy, if there are any?
- Do you see yourself as a literacy learner? Why do you want to learn?

### 1. CONTENT

- Can you tell me what usually happens in a normal day here in this literacy program?
- What kind of learning activities do you do? (Provide examples)

### 2. CONTEXT

- What elements of the program allow you to learn in a way that works for you? (Definition of elements: parts of the programs such as the instructor, the activities, the classroom, the other learners, the atmosphere)
- Would you say that this learning environment is a social environment? If so, does it help you learn? How does it help you?
- Have you used these learning activities outside of this program, like at home or work? How do you use them? (Provide examples)

### 3. COMMUNITY

- How do you know when you have understood a task or concept? (Provide an example)
- What do you do when you feel that you don't understand the task or concept?
- How does it make you feel when you understand a task or concept? (Provide an example)
- Have you experienced a time when there have been barriers in communication between yourself and another learner or between yourself and the instructor? (Provide an example) How did you overcome it?

### 4. PARTICIPATION

- Do you prefer to work by yourself or with other learners or both? Why?
- How do you help other students? How do they help you? (Provide an example)
- How does your teacher help you? (Provide an example)

### B. CLOSING QUESTION

- When you think about your experience here in the Deaf Literacy and Basic Skills program, how do you feel that it has helped you in the long term?

## Appendix G. Instructor Interview Guide

Name of Instructor: \_\_\_\_\_

Date: \_\_\_\_\_

Location: \_\_\_\_\_

### A. INTRODUCTORY QUESTIONS

- Tell me about yourself and how that brought you here to the Deaf Literacy and Basics Skills program?
- How has being a teacher influenced your perception on issues pertaining to deaf literacy in general?

### 1. CONTENT

- Can you tell me what usually happens in a normal day here in this literacy program?
- What kind of learning activities that are part of this literacy program? (Provide examples)
- What kind of teaching strategies do you use in your program? (Provide examples)
- How do these learning and teaching activities fit into your philosophy of teaching?

### 2. CONTEXT

- What elements of the program do you feel that contribute to the students' learning experiences? (Definition of elements: parts of the programs such as the instructor, the activities, the classroom, the other learners, the atmosphere)
- Would you say that this learning environment is a social environment? If so, does it enhance learning and what makes it social? (Provide examples)
- Why did you choose these learning activities to be used in the classroom? (Provide an example)
- Do you modify these resources or learning activities to fit the needs of the learners, such as deaf newcomers to Canada? (Provide an example)
- How do these resources or activities help the students learn? (Provide an example)

### 3. COMMUNITY

- How do you know that a student has understood the task or concept? (Provide an example)
- If you feel that a student has not grasped the meaning of a task or concept, how do you know when this occurs and what are the steps that you take to ensure that the student has understood? (Provide an example)
- What assessment tools do you use to judge the level of comprehension in this classroom? (Provide an example)
- How do you help students increase their level of understanding pertaining to literacy learning? (Provide examples)

### 4. PARTICIPATION

- How do learners work with each other? Who tends to be the helper and who was helped? (Provide an example)
- As an instructor, how would you describe your role as well as the roles of the learners in the learning environment?

**B. CLOSING QUESTIONS**

- Are you satisfied with the outcome of the learning in this classroom? Is there anything you would like to change or add to the program?
- When you think about your experience here in the Deaf Literacy and Basic Skills program, how do you feel that it has helped the learners as well as yourself in the long term?

### **Appendix H. Data Analysis Path**

The data analysis path for the five data sources of this research study was based on Creswell's (2007) procedures as applied to case studies:

*Reading and Memoing.* I read through the extensive observation notes and observation transcripts that were compiled during the research project more than once. My thoughts, questions and personal reflection were written in the margins in addition to the recording of themes that emerged from the observational data sources. During the interviews with the learners and instructors, no attempts were made to record notes as to ensure full attention and focus on the person being interviewed. Following each individual interview, I jotted down notes to record any personal insights, questions or reflections on the interview that would play a part in later interviews. I took care to find the time to write in my reflective journal after each day to identify key themes, issues and questions that arose from my observational and interview sessions.

*Describing.* According to Stake (2006), the case's activities can be influenced by the context in which it is set in, so it is necessary to study and describe the contexts. By providing a rich and detailed description of the case, the learning activities, the participants, and the environment it is set in – it was possible to see whether the social-cultural context of the case were inherently influenced by the contexts. Narratives of each individual interview were written in rich detail to show an accurate representation of how learning occurs within a social context in a Deaf LBS program. The transcripts of all interviews were analyzed to provide rich meaningfulness of the participants' experiences.

*Classifying.* After perusing through the collected data several times, I highlighted recurring themes, ideas and insights from the notes, transcripts and journal that were meaningful in nature as well as applicable to the research questions. The recurring instances were classified

into categories in order to establish themes and/or patterns that are integral to the context of the research study.

*Interpreting.* Once the data had been analyzed and coded, interpretation of the data led to the development of naturalistic generalizations. The interpretation of data allowed me to make comparisons with other similar studies.

*Representing and Visualizing.* The last stage of the data analysis phase of the research study was the representation and/or visualization of the data that had been derived from the five data sources. The data was represented through narratives, tables and figures that showed an in-depth visualization of the case study.