

**THE DEAF LITERACY PROGRAM AT
RED RIVER COMMUNITY COLLEGE: A SURVEY**

BY

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for the Degree of**

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ABSTRACT

The purpose of this thesis was to conduct a study of the needs of students of the Deaf Literacy Program (DLP) at Red River Community College, Winnipeg, Manitoba, Canada. Three research questions have been identified. (1) What do Deaf students enrolled in this program perceive their needs are in a literacy program? (2) Is the Deaf Literacy Program at Red River Community College congruent with students stated needs? (3) How is current information technology being used in the delivery of the DLP?

The total population enrolled in the program at any given time is approximately thirty and five Deaf adults. The participants of the study were seven current students, all of whom were over 18 years. Students at the DLP are Deaf adults who want to improve their abilities to read and write English. American Sign Language (ASL) is the first language of all DLP students, and the DLP is an ESL (English Second Language) program which emphasizes literacy development. The researcher conducted interviews with the participants. These interviews were videotaped and later transcribed and translated from ASL into English. The findings were as follows. In terms of needs, the students very clearly articulated that their goal was to improve their written English skills, with emphasis on grammar and syntax, so as to communicate more effectively with hearing people in their home and work environments. In terms of congruency, the program basically met the stated needs. However, the program should be more relevant to the home and work environment, and new communication technology should be incorporated more specifically into the program. Finally, the technology question clearly showed that students want the new information technologies to be fully integrated into the program.

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CHAPTER I

INTRODUCTION

Overview

The purpose of this study was to research students' needs and perceptions of Deaf Literacy Program (DLP) at Red River Community College, Winnipeg, Manitoba. The data reported in this study was gathered during February 1996.

What is the Deaf Literacy Program?

The Deaf Literacy Program (DLP) is located at Red River Community College in Winnipeg, Manitoba. This is a unique program that uses a Bilingual and Bicultural approach to teaching Deaf adults English literacy skills. The program acknowledges American Sign Language (ASL) as the natural first language of North American Deaf people and English as their second language. The DLP is a community based program for Deaf adults who are fluent in American Sign Language (ASL) and who desire fluency in English (ESL) as a second language. ASL is recognized as a formal language alongside English, with its own complex linguistic forms including grammar, discourse system, and symbols.

The DLP program uses a number of community-based processes for intake and curriculum design (Rodda, Bomak and Evans, 1991). The initial intake process included several "townhall" meetings in which members of the Deaf community participated. By collective negotiation, the instructional team and advisory committee, comprised of Deaf community representatives, determined the most advantageous means to allow Deaf persons access to this educational

program. This group determined that it was important that the DLP not to be considered an institution based program. Rather, the DLP was then designed as a community based program with the potential of empowering members of the Winnipeg Deaf Community Centre to be a part of the decision-making process within the program. A community-based program is a program that incorporates decision-making input from the community for information sharing and for giving feedback to the program.

In lieu of traditional assessment and clinical approaches which typically required standardized tests and comprehensive assessment to pinpoint the abilities and deficits of the individual, the community-based bilingual and bicultural educational program was planned with full regard for the individual's involvement, both in the Deaf community and the broader hearing community in which he or she was integrated.

The individuals identified learning materials, used their own experiences and employed interactive learning techniques which directed the development of the program. Students came with varied skills, developed individual short and long term goals and were encouraged to evaluate their own progress based on these goals throughout a six month period. The Deaf Literacy Program in Winnipeg is the only one of its kind in Canada and possibly in North America that uses a community-based programming model.

The Deaf Literacy Program encourages Deaf students to explore their own Deaf heritage, with the ultimate goal that they become empowered as Deaf individuals. It recognizes both Deaf culture and the diverse hearing cultures within society, which is a principle of the bicultural philosophy. The DLP incorporates a Bilingual and Bicultural philosophy by recognizing both American Sign Language (ASL) and English as the second language (ESL), moving from

traditional theory into a challenging, risk free learning environment and toward successful experiences for these Deaf students. The DLP was established in January 1991. Two Deaf instructors were hired by Red River Community College.

The DLP is closely monitored by a steering committee, the Deaf community, and the Society for Manitobans with Disabilities. These groups along with Deaf community members, staff and students were involved with the DLP for policy development, program support, and in the decision making process as a collective.

What is Literacy?

" Literacy was used as a general term to describe fluency in both reading and writing in the spoken language of society. Functional Literacy was defined as the ability to use printed and written information to function in society " (Southam 1987, as cited in Carver, 1989, p.3).

Erting's definition of literacy, " patterns of language and cognitive development that can develop through teaching and schooling" (1992, p.103). coupled with Southham's definition above provides a useful starting point. This definition means that the literacy does not assist educators nor parents when the focus is the Deaf individual's literacy skills in a competing workplace and radically changing society. Literacy means something different for Deaf individuals than it does for Hearing people. For one thing, ASL does not have a written form, so a traditional definition of literacy (ie. reading and writing), does not fit. Erting (1992) stated that a natural language created by members of a visual culture and so fully available to Deaf children, can function as a first-order complex symbol system for them and through progressive social interaction can develop second-order symbolic processes involved in reading, writing and engaging in meaningful discourse through English.

A second aspect of literacy for Deaf adults, is the fact that reading and writing is accomplished through their second language. Deaf adults use ASL for communication but use written English as their printed media. Within the majority hearing society, a Deaf person's ability to achieve is often predicated on his/her written English skills. Poor English literacy can have a negative impact on a Deaf person's economic and social opportunities. English is communicated to Deaf students through speech and invented systems of representing English by the hands. American Sign Language (ASL) is the language of instruction. English is taught as a second language to Deaf students. In traditional education, one major goal of the school is to develop literacy in English. Two major goals of the DLP program are to develop literacy in ASL and English. In traditional Deaf education, it is important that young Deaf children have teachers who can speak in order for the students to learn to speak themselves. Deaf teachers are best to be employed in the upper grades for those students who have failed to learn to speak. American Sign Language (ASL) is used by the students to communicate with one another. In Bilingual-Bicultural educational, in order for Deaf children to acquire American Sign Language (ASL), they must have full access to that language during the early years for acquiring a language. Thus, fluent users of American Sign Language (ASL), must teach Deaf babies and young Deaf children. Educational methodologies are developed by researchers who are Hearing and are based on data that are generated by investigating what Deaf children are "not" doing and comparing Deaf children to hearing children. In Bilingual and Bicultural Education, Education methodologies are developed by researchers who are themselves Deaf and who investigate how linguistic and cultural factors influence child development and learning. In traditional education, decisions effecting the lives of Deaf children and their education are made from the hearing cultural perspective.

As a result , an attitude that Hearing people know what is best for Deaf children exists within the school system. In Bilingual-Bicultural education system, programs are managed from a Deaf perspective, fostering an attitude of Deaf self-determination and empowerment. (Reynolds & Titus, 1991). The traditional education system has also created barriers to a Deaf student's acquisition of English literacy skills. Educational programs have focussed on the acquisition of English through unnatural means (ie. speech) and denigrated the use of ASL. In order to acquire English literacy skills, Deaf students must stop viewing the English language as a language of oppression. This can be accomplished by allowing the student to gain control of the learning environment at his or her own pace and to develop short and long term goals based on the individual' s needs. In a world with rapidly changing technological advances, a new approach to developing literacy skills among the Deaf community if Deaf people hope to play a positive role in future society.

The DLP uses a student-centred learning approach which focusses on the student's learning needs, which then direct his or her learning goals and choices. Students design plans for their own learning objectives. Instructors then organize the subject matter for tasks the students select and gather resources they need to develop a learning plan that suits the students' individual considerations. As well, the learning plans must be culturally and linguistically sensitive to Deaf people's needs as ESL students. The program is unique in that it attempts to satisfy students' need to have their language, ASL, and their culture respected, rather than be marginalized.

What is Bilingual and Bicultural Philosophy?

Johnson, Liddell and Erting (1989) presented guiding principles for a model program. The principles gave some useful ideas and theories as to how the students can succeed in their learning environment. In addition, the principles suggest keys for a successful Deaf adult literacy program. The following items of the guiding principles for a model program are from

" *Unlocking Curriculum: Principles for Achieving Access in Deaf Education* " (Johnson, Liddell & Erting, 1989)

- 1 " Deaf children will learn if given access to the things we want to learn." (p. 15)
- 2 " The first language of the deaf child must be a natural sign language." (ASL) (p 15)
- 3 " The best models for natural sign language acquisition, the development of social identity, and the enhancement of self-esteem for deaf children are deaf signers who use the language proficiency " (p.16).
- 4 " The natural sign language acquired by deaf children provides the best access to educational content " (p 16).
- 5 " Sign Language and spoken language are not the same and must be kept separate in both use and in the curriculum." (p. 16).
- 6 " The learning of a spoken language (English) for a deaf person is a process of learning a second language through literacy (reading and writing)." (p. 17).
- 7 " Deaf children should not be seen as 'defective models' of normally hearing children." (p. 18)
- 8 " We concur with one of the observation of the report of the Commission on Education of the Deaf, that there is 'nothing wrong with being deaf' and urge its incorporation into the philosophy of all Deaf educational programs." (p 18).

9 " The 'Least Restrictive Environment' for deaf children is one which they may acquire natural sign language and through that language achieve access to spoken language and the content of the school curriculum." (p. 18).

These principles may be suggested to apply for all levels of Deaf educational programs across Canada and USA, and includes K-12 and college levels. Most of the educational systems have seemingly resisted or ignored these principles. They need to respect the Deaf individual's own literacy and cultural needs and to present deafness, not a handicap, but as minority linguistic and cultural phenomenon

A Bilingual and Bicultural philosophy emphasizes the use of both American Sign Language and written English. The Bilingual and Bicultural educational philosophy differs from traditional education of the Deaf philosophies in that it does not emphasize the acquisition of verbal skills. Instead, the Bilingual and Bicultural approach encourages the use of ASL as a means of acquiring written English literacy. As well, this approach celebrates Deaf people as a cultural and linguistic minority within the majority society. The Bilingual and Bicultural approach to literacy involves teaching them to understand their own language and culture and using that knowledge to develop written English literacy skills. ASL is used in the classroom as the language of instruction and the language of communication between the students. Using ASL in the classroom validates the language as a vehicle for education. The differences between hearing and Deaf individuals are compared and contrasted with the view that cross-cultural awareness can lead to a reduction of conflict

Proponents of the Bilingual and Bicultural philosophy of educating Deaf people borrows from the principles developed in bilingual programming for hearing students. Although Deaf people have traditionally been taught as monolingual spoken English users, there is a rich body of

literature on bilingual education that can be adapted for Deaf students. As the paradigm shifts from viewing Deaf students as "handicapped" to viewing them as Bilingual and Bicultural individuals, the development of a Bilingual and Bicultural methodology will grow. The Deaf community has wholeheartedly accepted the Bilingual and Bicultural philosophy and will continue to monitor its implementation as a formal curriculum is developed.

What is American Sign Language?

American Sign Language is a visual-gestural language created by Deaf people and used by approximately one-half million Deaf Americans and Canadians of all ages. American Sign Language (ASL) has discrete units that are composed of specific movements and shapes of the hands and arms, eyes, face, head and body posture. These movements or gestures, then serve as the "words" and "intonation" of the language. ASL uses body movements instead of sound, therefore listeners or receivers use their eyes instead of their ears to understand what is being said. And because all linguistic information must be received through the eyes, the language is carefully structured to fit these needs and capabilities. (Baker & Padden, 1978). ASL is organized in a way that takes full advantage of its visual and spatial properties.

" A language is a system of relatively arbitrary symbols and grammatical signals that change across time and that members of community share and use for several purposes: to interact with each other, to communicate their ideas, emotions and intentions and to transmit their culture from generation to generation." (Baker & Cokely, 1980, p.31).

This definition applies American Sign Language because it has made use of iconic and arbitrary symbols, has grammatical rules (facial expressions), changes over time, and incorporates new technological signs as do spoken or written forms of languages in other language communities. Members of the Deaf Community are able to use the ASL to

communicate effectively both receptively and expressively. The language has become the conduit for the transmission of the Deaf minority culture (O'Rourke, 1975 & Woodward, 1978). Deaf people use ASL because it is uniquely suited to visual encoding and processing. But even further, from a political and cultural perspective, ASL also functions as a symbol of liberation in the Deaf community.

" ASL is at the heart of the Deaf community. If any changes in thinking or behaviour were to happen within the community, they would have to be proposed in the language of the community." (Markowicz & Woodward, 1978 as cited in Baker & Cokely, 1980, p.59).

A Definition of Deaf Culture

Padden offers the following definition of Deaf culture:

" Deaf Culture is a set of learned behaviours of a group of deaf people who have their own language (ASL), values, rule of behaviour and traditions." (1980, p.4).

There are five main components of Deaf culture: language, values, traditions, rules of behaviour and identity. According to Padden's definition, the first aspect of Deaf Culture is American Sign Language (ASL). Language can influence the culture and culture can influence language. Political correctness, for example, has impacted the lives of Deaf people and the way in which the language is used. Second, Deaf people place high values on many things, relating to their experiences such as the use of ASL, eyes and hands, clear communication, residential schools for the Deaf or Deaf schools and Deaf clubs representing their cultural values. Third, rules for behaviour mean that people behave in certain ways when they are with deaf people consciously or unconsciously and behave in other ways when they are with hearing people. Fourth, traditions are a very important to Deaf Culture. For example, there are many stories, and even jokes that are passed on from

generation to generation of Deaf people through Deaf families or through Deaf schools and Deaf clubs. The last aspect of the Deaf culture is identity. The identity is a very important to the Deaf culture as it is in all cultures. Identification as a part of the Deaf culture, and how he or she is viewed in the eyes of other Deaf persons is critical important. Some may accept or reject a Deaf person for various reasons such as his/ her attitudes toward Deaf people. Finally, Deaf people prefer to be called Deaf and to have it written with a capital "D" (for examples Padden and Humphries, 1988, p.2). Researchers tend to capitalize the "D" in deaf when referring to the cultural aspects of Deaf people. The use of a lower-case "d" on the other hand, refers to the audiological condition of deafness and not any of the cultural aspects. In this way, Deaf people feel empowered as a cultural group, similar to other ethnic groups, such as German or French people

Specific Problems of The Deaf Community in Manitoba

There are at least four specific problems facing the Deaf community in Manitoba that are relevant to this study. The issues are as follows:

- 1 Generally, Deaf people in Manitoba are not proficient in their second language, English, upon completion of their secondary education. They face difficulties communicating in English with people in their home and work environments and these difficulties lead Deaf people to the realization that they must develop their written English skills to function more effectively in work and home environments. Also, the Deaf community recognizes that economic and vocational success depend a great deal upon English literacy skills

- 2 Historically, Deaf community members had no access to ESL instruction in Manitoba, because colleges and school divisions did not offer ESL programs for Deaf adults. More

importantly, there were no programs where the instructors were fluent in American Sign Language and had knowledge of the Deaf adults' specific learning needs.

3 The researcher conducted a study of the stated students' needs after their completion of DLP, because the DLP students did not meet their needs from the outcomes of the program. The purpose of the study was to determine whether this unique program provides an effective learning opportunity for the students. There may be a problem if the DLP students did not achieve their learning goals or were not satisfied with the program. The researcher will gather data for external and internal learning outcomes to identify the program's strengths and weaknesses in order to revise teaching strategies.

4 A fourth issue is whether or not the DLP is facing radically changing technology and is aware of new technology issues. It may be suggested that they take training in the new technology courses to secure their jobs and compete in the labour market.

Research Question

Based on the foregoing, three research questions have been identified:

- 1) What do Deaf students enrolled in this program perceive their needs are in a literacy program?
- 2) Is the Deaf Literacy Program at RRCC congruent with students stated needs?
- 3) How is current information technology being used in the delivery of the DLP?

A survey instrument was developed to explore these questions. Appendix A gives the complete survey instrument. It consisted of four types of questions classified as Demographic, Needs, Congruency, and Technology questions. The demographic questions provided general information (personal data) about the respondents. Questions # 1, # 2, # 3, # 4, # 5 and #6 were demographic. Needs questions explored the students' needs in order to identify their personal

goals and options for learning ESL for their work and home environment. Questions # 7, # 8, # 9, #10, #11, and #12 were intended to focus on this dimension of the study. Congruency questions have been developed to explore the relationship between what the students acquire and what the students want. It is a process to identify the strengths and weaknesses as outcomes of the DLP. Questions # 13, # 14, # 15, # 16, #17, and #18 explored this dimension. Technology questions focused on the real and potential impact of technology for Deaf students in Manitoba. Questions, #20, # 21, #22, #23 and #24 cover this issue. In summary, the interview focused on the three themes of Demographic, Needs, Congruency and Technology. A total of 24 questions provided the data. Student responses to these questions provided a first step in analyzing the research questions identified above.

Limitations of the Study

In this study, one of the major limitations was that the researcher is also an instructor in the DLP thereby possibly influencing the quality of the students responses. A second limitation to the study is that the sample size is very small. Therefore any statistical generalization may not be valid.

Delimitations of the Study

Delimitations are those limits to the study which are imposed by the researcher. In this study, the major delimitation is that the researcher has focused only on current students and there may be, therefore, a significant difference in potential responses between past and current students. A second major delimitation is that the survey questions were limited to three basic areas of inquiry. There are a number of other areas that could have been explored but were not

(ie would the students have reacted differently if there was a female instructor in the program?)

Another issue that could have been explored is whether DLP students should pay tuition, since students may be more motivated and committed to a program which is not free.

Chapter Summary

This chapter provided an overview of the DLP. From this overview, three research questions were identified. These questions were (1) What do Deaf students perceive their needs to be? (2) Is the DLP program congruent with stated students needs? and (3) How is current information technology used in the DLP? To answer these questions, a 24 item questionnaire was developed to investigate four categories: demographic, needs, congruency, and technology. Chapter Two will provide a review of the literature on Deaf Literacy. Chapter Three will lay out the research design and methodology. Chapter Four will present and analyze the results. Chapter Five will summarize and provide conclusions.

CHAPTER II

REVIEW OF LITERATURE

This chapter provides an overview of the education of Deaf people as it pertains to language literacy. The chapter commences from a historical perspective, includes contemporary research developments, provides a synopsis of literacy programs for Deaf Canadians, as well as examines a critical proposal from the Canadian Association of the Deaf (CAD). This chapter also assesses the impact, if any, that current technological developments and the information highway have on the literacy of Deaf people.

Historical Perspective

In order to live and function within a society, people must communicate. In ancient and medieval times, deafness was viewed as the most grievous handicap that could afflict a person. Historically, speech was believed to be the most fundamental means of communicating in society. To have speech, one must be able to hear. Deaf people's lack of hearing impedes the development of speech skills. People behaved differently towards deaf people and made it difficult to function as a minority within the majority society.

This issue was discussed by Plato and Aristotle, the Greek teachers, and philosophers who influenced the way people thought for many years. Aristotle wrote:

" Men that are born deaf are in all cases dumb; that is to say, they can make vocal noises, but they cannot speak. Children, just as they have no control over other parts, so have no control at first over the tongue. But it is so far imperfect and only free that it detaches itself by degrees, so that in the interval, children mostly lisp and stutter." (Hodgson, 1953, as cited in Carmichael, 1963, p.3).

For centuries, because of Aristotle's teachings, the learned thought that deaf people did not have the potential to speak and were therefore uneducable and not worthy of time or effort.

The earliest recordings of deaf education originally came from 16th century Spain (Werner, 1932 as cited in Van Cleve & Crouch, 1993). At that time, Spain was a wealthy country after having conquered the Moslems. Deaf people had very few rights though, and for example, could neither own nor inherit property (Werner, 1932 as cited in Van Cleve & Crouch, 1993, Carmichael, 1963). Inheritances would be granted, however, if the individual could learn to speak; therefore, the deaf sons of wealthy Spanish parents who could afford to do so, were tutored so as to acquire speech abilities. Thus, the origins of the education of deaf people.

Fray Melchor de Yebra, a Spanish monk, is credited with first recording how deaf people communicated, by observing and documenting the handshapes that represented the letters of the Spanish alphabet that deaf people used to communicate with each other. (Werner, 1932 as cited in Van Cleve & Crouch, 1993). He recorded the handshapes and believed they would be beneficial to dying people who had lost the ability to speak, as a means of making confessions while on their deathbed. He also believed that this *fingerspelling* could be useful for bringing religion to deaf people because:

" it can be employed to console other deaf people who have learnt the hand alphabet because they have been obliged to do so in order to be able to converse with other people." (Werner, 1932 as cited in Van Cleve & Crouch, 1993, p.11)

Because of de Yebra's religious affiliation, his work helped to create a strong relationship between the monks and deaf people. Though fingerspelling was principally used for religious education, it also facilitated, for the first time, the communication of general information to deaf people. The manual alphabet that is still being used in North America and France today, have their foundations in the handshapes recorded in Spain.

Charles Michel de l'Epee (1712-1789), who was a French priest, made significant contributions to the education of the deaf. He became committed to the education of deaf people

who did not come from wealthy homes. In contrast to what occurred in Spain, he believed that the signs deaf people used was a natural choice for instructing them in acquiring a written form of language. He adapted the signs that he learned from the deaf community. His methodology attracted public interest, and he soon had an abundance of students. Fortunately, he inherited some money from his father and was in a position to establish a school with his own funds. However, his fortune was limited, but he was able to continue teaching deaf students after receiving gifts of money from the emperors of Russia and Austria. He is considered the father of sign language, despite the fact that his modified signs became too artificial and unacceptable to the deaf community in Paris. He was a manualist whose methodology had tremendous influence and can still be seen today. de l'Epee trained many teachers of the deaf who went to other countries. Two years after he died, the French government took over his school and it is recognized as the first public institution for the deaf in Europe. (Carmichael, 1963).

At the same time as de l'Epee was developing his signs in France, Samuel Heincke was developing an unique system of communication in Germany. He was interested in deafness and successfully began teaching deaf children. He believed that the fundamental method to learning was an oral approach. Heincke conceded that if a child was not able to achieve good oral skills, then the child should try to simultaneously use signing and oral skills. When Heincke began his teaching, he taught the students reading and writing before speech, but later decided to reverse the process. He believed that ideas were expressed orally, and writing was only used to reinforce the learning. His methodology did not spread very quickly throughout Germany or to other countries, because he was secretive and isolated. He became the leading oralist of his time. (Carmichael, 1963).

The researcher discussed how two methodologies emerged: teaching deaf children through speech (oralism) and teaching through the use of signs (manualism) and their social, religious and political aspects. Heincke's methodology and philosophy stood in stark contrast with those of de l'Epee and the two divergent approaches were bitterly divided. The manualist, de l'Epee, was associated with France and the Catholic church, and the oralist, Heincke, was associated with Germany and the Protestant church. The fact that the methodologies were aligned with separate churches only furthered the controversy. This difference of opinion in regard to how language should be taught to deaf people still exists.

A delegation of teachers of the deaf, who represented England and its strong oral tradition, attended the Milan International Congress in Milan, Italy in 1880. They were successful in influencing how future deaf people would be educated by convincing the other delegates to support their proposals.

- 1) They favoured articulation, or the oral method, by a majority of 116 to 16.
- 2) They opposed teaching of mixed oral and signing.
- 3) They not only recommended, but demanded state aid for such programs.
- 4) They recommended that education curriculums should follow as closely as possible that of the normal school child.
- 5) Admission to the school should not be later than ages 8 to 10 years.
- 6) There should be not more than ten children per teacher, whereas the normal classes at the moment there were approximately sixty children. (Hodgson, 1953, as in cited in Carmichael, 1963, p.49).

The most significant result of this conference was an internationally coordinated and aggressive, shift towards oralism as the only appropriate method for educating deaf people.

Oral abilities became emphasized and language competency was minimized. As a result, deaf children suffered greatly due to their relatively late exposure to any understandable form of language. As a general rule, deaf children had inadequate preschool language training, resulting in children entering the school system with inadequate language skills, either signed or spoken. From the outset, this placed the deaf student in a deficit position. Both teacher and pupil were under great pressure to provide demonstrable language successes in a short period of schooling. Educators were under considerable pressure to find methods of teaching that would allow deaf children to succeed at the same levels enjoyed by hearing children. Because school authorities realized that teachers only had limited knowledge of teaching methods for deaf children, they lobbied for research in the field of deaf education. (Carmichael, 1963). This period can only be characterized as one of darkness; the educational system produced many failures and the teaching methods used failed to provide deaf students with the skills they needed. Unfortunately, educators maintained a pathological view of deafness, the deaf child was seen as someone that could be "rehabilitated" given the proper approach, technology and adaptive measures.

This period saw a wide variation of educational opportunities for deaf children for a number of reasons. Once again, the fate of a deaf child's education depended upon his or her family's ability to pay. There were no standards teacher qualifications, which led to a variation of teaching methods, resulting in dramatic differences in deaf students' academic results. Oralism was still considered the principle method of instruction, despite opposition from deaf adults citing the methods' inability to produce significant increases in the standard of education.

Dr. Kerr Love, a Scottish physician, advocated a rare approach that focussed more on the deaf person's ability to learn, than on how they learned when he advocated.

"Forget the method, and study the child."
(Hodgson, 1953, as cited in Carmichael, 1963, p.58).

The effects of the congress are still present, but in the late 20th century, there has been a shift toward a more holistic approach to Deaf children. Laws have been passed that make governments responsible for overseeing Deaf schools, and the use of sign language has been recognized as an asset in the instruction of Deaf children. The education system has accepted that Deaf students need to acquire post-secondary education. A critical element in this movement, has been the recognition of Deaf people as a cultural and linguistic minority. With this recognition, has come the development of curricula, and teaching methodologies that are considerate of Deaf learners' needs (Carmichael, 1963).

In the last quarter of a century, American Sign Language (ASL) has been rediscovered as a language of instruction for Deaf people. Although many educators view the use of ASL in the classroom as a novel idea, it is actually part of the tradition started by educators like deYebra, de l'Epee and deaf teachers.

Perspectives of Deafness

Reynold & Titus (1991) highlighted the perspective of Deafness as pathology and difference. In Pathology, they define deafness as pathological condition, a defect or handicap which distinguishes abnormal Deaf person from normal hearing persons. In Difference, they define deafness as merely as difference, a characteristic which distinguishes normal Deaf persons from normal hearing persons. They also recognize that Deaf people are a linguistic and cultural minority. In Pathology, they deny, downplay or hide evidence of deafness. In Difference, they openly acknowledge deafness. In Pathology, they seek a "cure" for deafness; focus on ameliorating the effects of the " auditory disability." In Difference, they emphasize the abilities of

Deaf persons. In Pathology, they give much attention to the use of hearing aids and other devices that enhance auditory perfection and or focus on speech. In Difference, they give much attention to issues of communication access for Deaf persons through visual devices and services. In Pathology, they place much emphasis on speech and speech reading (oral skills); avoid sign and other communication methods which are deemed " inferior." In Difference, they encourage the development of all communication modes, including but not limited to speech. In Pathology, they promote the use of auditory-based communication modes; frown upon the use of modes which are primarily visual. In Difference, they strongly emphasize the use of vision as a positive, efficient alternative to the auditory channel. In Pathology, they describe sign language as inferior to spoken language. In Difference, they view sign language as equal to spoken language. In Pathology, they view of spoken language as the most natural language for all persons, including the Deaf. In Difference, they view sign language as the most natural language for people who are born Deaf. In Pathology, they make mastery of spoken language a central educational aim. In Difference, in education, they focus on subject matter, rather than on a method of communication and they work to expand all communication skills. In Pathology, they support socialization of Deaf persons with hearing persons. They frown upon Deaf/Deaf interaction and Deaf/Deaf marriages. In Difference, they support socialization within the Deaf community as well as within the larger community. In Pathology, they regard "the normal person" as the best role model. In Difference, they regard successful Deaf adults as positive role models for Deaf children. In Pathology, they regard professional involvement with the Deaf as "helping the Deaf" to "overcome their handicap" and to " live in the hearing world." In Difference, they regard professional involvement with the Deaf as " working with the Deaf " to " provide access to the same rights and privileges that hearing people enjoy." The last aspect of perspectives of Deafness as Pathology and Difference,

in Pathology, they neither accept nor support a separate " Deaf culture." and in Difference, they respect, value and support the language and culture of Deaf people. (Reynolds & Titus, 1991).

The oral method of education is more popular in some countries and in some American schools for the Deaf, because of a few competent teachers, but Bilingual and Bicultural education, the incorporation of technology, and social advances being made toward improving the system of deaf education are all making it more possible for Deaf people to access learning opportunities in more beneficial ways.

By way of summation, deaf people were for centuries not educated. Spanish monks, who had strong religious motivation, were the first educators of the deaf. Methodologies and philosophies were furthered in the 18th century by de l'Epee of France, and Heincke of Germany. Early educators of the deaf were ordained religious leaders who wanted to dedicate their time to moral and religious concepts. They wanted their pupils to gain an understanding of the spoken word. It is now becoming generally recognized that the importance of a communication mode by using sign language is only one of the many factors affecting the educational environment. Controversies over communication methodology have raged for almost 200 years.

Recent research has provided important insights into the comparison of oral and manual communication , the nature of language itself, language acquisition, the role of family, and the importance of culture. This information has provided a better understanding of the deaf children's needs. The traditional schools for the deaf have fostered and provided a setting for development of Deaf culture and ASL, which was largely unintentional and in the view of some, counter-productive to the schools' stated objectives. This cultural and linguistic identification has in many ways mitigated against many parents' desire to integrate their deaf children into "hearing society".

Until recently it was widely believed that sign language had no role to play and interfered with the acquisition of English.

The controversy regarding residential schools for the Deaf versus day classes and integration is largely related to communication methods and the extent to which concept of a Deaf society and Deaf culture takes priority over integration and merging with the so-called hearing society. Public Law 94-142 was a law established in the United States in 1975 that guaranteed full educational opportunities for all handicapped children. Under this law "appropriate" education was mandated to be in "the least restrictive environment" (LRE), and mandates Individualized Education Programs. It is a core of federal funding for special education. This has led to what some consider to be the mistaken notion that mainstreaming and the least restrictive environment are synonymous. (Johnson, Liddell, & Erting, 1989). There are many who would suggest that "LRE" is determined by referring to a continuum of services. Public 101-476, this law changed the name of Education for all Handicapped Children Act (P.L. 94 -142) to the Individual with Disabilities Education Act (IDEA) to reflect the important shift in viewing children as "personal first" as opposed to "Handicapped children". A practical result of this law was the shift from sending Deaf children to residential schools to mainstreaming them in local schools. But it simply was not the law alone and it was also parental preference not to send children away. This has resulted in a dramatic decline in enrollment in the traditional state schools for the Deaf. In Ontario, Bill 82 also advocated universal access to education in the most appropriate environment for all exception children. There has been a tendency in Ontario for some parties to advocate mainstreaming as the least restrictive environment as well. The Ministry has never promulgated this position and there is no mention of the term least restrictive environment in any legislation regulation or directive. Rather the term "most enabling environment" is used. Manitoba special

education policy uses the same term, but it has been defined the same as LRE.

Contemporary Research Developments

The Canadian Association of the Deaf (CAD) is a non-profit organization serving Deaf and hard of hearing people that was established to protect and promote the rights, needs and concerns of Deaf Canadians. In July of 1994, CAD issued two position papers discussing the main issues of *Deaf Education* and *Literacy* for Deaf people across Canada. The first issue focussed on the following question: Should children who are Deaf be educated at schools for the Deaf or should they be in a mainstreamed school? The CAD's position is that the decision should be to place the Deaf child in the most enabling environment and to provide support services (whether they be American Sign Language as the language of instruction, interpreters, or technical assistance) which build upon the child's abilities rather than his or her disabilities. The Canadian Association of the Deaf believes that the concept of centralized schools for Deaf children remains an educationally viable choice. Deaf and hard of hearing students should have the option of attending either comprehensive centralized schools for the Deaf or mainstreamed programs in public or separate schools. The placement of such students should be determined on the basis of satisfying their educational and psychological requirements in the most enabling environment. For many Deaf and hard of hearing students, the most enabling environment is a comprehensive centralized school for the Deaf, rather than a regular public school, even with considerable support services. For others, being mainstreamed in a regular school may be an appropriate environment. (CAD, 1994).

The Canadian Association of the Deaf therefore insists that the provincial Departments of Education become aware of the unique educational needs of Deaf individuals, and that the

Departments adhere to the principles of educating children in the environment which is most appropriate and socially accessible for them. Placing Deaf and hard of hearing children in regular schools with poor quality support services, such as incompetent interpreters and special devices for the Deaf students, and neglecting their need to have meaningful interaction with other students and staff members cannot be justified. Keeping them in mainstreamed programs until it is proved they cannot be successful and then placing them in a school for the Deaf is inconsistent with any basic educational goals and principles. In addition, this practice is deemed pedagogically irrelevant and irresponsible.(CAD, 1994).

The Canadian Association of the Deaf urges provincial governments to remain committed to protecting Deaf and hard of hearing students against the undesirable effects that may result from the current trend of turning the responsibility for educating them over to public schools boards, districts, and individual schools. The governments must ensure that provincial schools for the Deaf remain available for those who prefer them.(CAD, 1994). The Canadian Association of the Deaf requests a working relationship with a federal and provincial body to promote equal education opportunities and standardization of quality in all educational programs with Deaf and hard of hearing students. The Canadian Association of the Deaf stands behind the right of individuals to acquire and use high-quality functional language and communication skills including sign languages for interpersonal relationships. CAD insists upon the adherence to the principle that teachers should not teach American Sign Language (ASL), Langue des Signes Québécois (LSQ), or Maritime Sign Language (MSL) unless they are competent Sign Language users and or have been certified by a provincial or national body recognized by the CAD.

The Canadian Association of the Deaf encourages the availability of ASL, LSQ, and MSL second-language classes as credit-earning courses in school and college and university programs.

These courses should be taught by culturally Deaf persons with ASL, LSQ or MSL competency along with teaching abilities and aspirations.

The Canadian Association of the Deaf encourages a better public understanding regarding the need of the Deaf to use a language that efficiently meets their educational and psychosocial needs. The CAD recognizes that the sign languages of the Deaf, such as ASL, LSQ, and MSL, are one of the means through which to acquire English or French as a second language.

Any attempt to repress the sign languages of the Deaf in educational programs is inconsistent with all basic goals of education and interferes with the human predisposition to become lingually independent through interactive communication with other people. In addition, this repression interferes with an individual's ability to become either bicultural or multicultural, whether in or out of the educational environment. (CAD, 1994).

The Canadian Association of the Deaf does not recognize any form of manually coded English or manually coded French as a bona fide Sign Language of the Deaf but rather as systems of English or French. The manually coded English is compared to written English or more structured and word orders in English and is not a natural language for the Deaf people for instruction and communication. Educators have been emphasizing manually-coded English or manually-coded French, as well as oral English or oral French, in order to promote unlingualism in either English or French without giving thought or respect to the ability to Deaf students to be bilingual users of a natural Sign language. (ASL, LSQ, or MSL).

The CAD issued a second position paper which is directly related to the scope of this thesis, literacy of Deaf people. The paper, *Literacy*, focuses on the question of why there is such a high rate of functional illiteracy in the Deaf community, and what can be done about. The CAD's position is that the high rate of functional illiteracy is not a direct result of deafness. Shifting away

from the deficit model of early intervention and education and towards the difference model would help to improve the literacy and educational achievement of Deaf people. (CAD, 1994).

The Canadian Association of the Deaf subscribes to the concept that a literacy status on par with that of the general population is feasible and attainable for Deaf individuals today. The CAD rejects the concept that deafness is the major cause of literacy problems in Deaf children. The CAD attributes the literacy and educational problems of Deaf Canadians to the impaired communication environment surrounding them, to the deficit model orientation of early intervention, education and teacher training programs, and to the dearth of qualified Deaf professionals and educators in all such programs. The CAD subscribes to the difference model principle in which all the intact faculties and strengths of the Deaf individual are fully utilized in his/her development, as opposed to the attempted utilization of defective or inadequate faculties.

In order to enhance the literacy and educational status of the Deaf individual, the CAD makes the following recommendations:

- 1) The Deaf individual should have free and unrestricted access to visible and natural language and communication.
- 2) The focus should be shifted away from the deficit model orientation and towards that of the difference model in all early intervention, educational and teacher training programs serving Deaf students.
- 3) Such programs should commit themselves to the training and or employment of qualified Deaf professionals and educators in significant numbers.
- 4) Such programs should place greater emphasis on the employment of print languages as a key instructional and communication modality. (CAD, 1994).

Existing Programs

Educators have addressed the problem of illiteracy in Canada's Deaf community by establishing educational programs. Although, the programs vary slightly, they have three aspects in common: a) ASL is the language of instruction in the classroom; b) English as a Second Language teaching methodologies are used, and c) the programs follow the difference model. These programs can be grouped in three categories: 1) Lifeskills 2) Post-Secondary preparation programs and 3) Literacy programs. The T.H.R.I.V.E Program is located at Oshawa Deaf Centre, Oshawa, Ontario. It is based on the cultural model which focusses on language, literacy and lifeskills for the adult learner. Teaching is in small groups and one to one settings. Out tips are a vital component of this program. Language learning is based on experience. This program focuses on visual cues which are an asset for the Deaf English, which for example, is taught through visual print materials.

Impact ASL Program is a non-profit program offered by the Canadian Hearing Society in Toronto, Ontario. The program was established in 1986 and is a program serving Deaf adults 16 years and over, who have under-developed language skills. It is designed to train adults for an independent life and to increase ASL communication skills.

The Northern Literacy and Lifeskills Program (N.L.L.P) is offered by the Canadian Hearing Society in Sudbury, Ontario. Established in 1990, this program provides service to Deaf adults with under-developed language and daily living skills issues. The N.L.L.P. is designed to train adults for an independent life and to increase communication skills in American Sign Language (ASL). Canadian Hearing Society offers another literacy program in Thunder Bay, Ontario. The program provides Deaf adults with an opportunity to improve their independent

living skills and to increase their communication skills in ASL and basic English.

The Deaf Blind Services of the Canadian National Institution of the Blind, in North York, Ontario, offers a literacy program for deaf-blind adults to improve their reading and writing skills. All instruction is provided in the student's preferred method of communication on a one to one basis. One device that is used is the Circuit Television Reader which magnifies print to the size the student requires. Computers are also used that can be accessed through either large print or braille.

A program specifically designed for immigrant Deaf people is called the Language Instruction For Newcomers To Canada (L.I.N.C), and is located in the Toronto and Mississauga area. The goal of this program is to provide Deaf and hard of Hearing clients from other countries with basic reading and writing skills, so that they can acquire a comprehension of the English language as well as to facilitate their social, cultural and economic integration into Canada so that they become participating members of Canadian society.

The Capital Region Centre for the Hearing Impaired, in Ottawa, Ontario, has a literacy program to serve Deaf and Hard of Hearing adults. The students direct the program. Each person chooses what they want to work on, how they want to do it and the times they will participate in activities.

George Brown City College, in Toronto, Ontario, offers a 34 week (2 semester) preparatory program for Deaf and hard of hearing students. The program is designed for those students who are interested in furthering their education at George Brown City College or other community colleges, but who are not academically ready for the college-level courses of their desired program.

Vancouver Community College is located in Vancouver, British Columbia, and offers an

ESL program for Deaf and hard of hearing students. The program provides Deaf adults with ESL in order to write and read effectively with hearing people.

American Programs

Gallaudet University is the only university in the world serving a student body of primarily Deaf and hard of hearing students. Established in 1864, Gallaudet has grown from a small college to a multi-faceted university and the world's largest resource on deafness. Gallaudet offers academic programs leading to undergraduate and graduate degrees in many fields of study and a college preparatory program. Gallaudet also houses the English Language Institute, a program established to assist international Deaf students to improve their English skills. The English Language Institute program's goals are to provide the highest quality instruction, to enable students to enroll in an academic program as soon as possible, and to instill the confidence necessary for effective use of English for both academic and social purposes.

California State University, Northridge provides the Deaf and hard of hearing community with one of the most comprehensive mainstream college programs in the United States. California State, Northridge was one of the first mainstream universities in the United States to admit Deaf and hard of hearing people when it accepted two graduate students in 1964. California State University, Northridge has the largest nationwide enrollment of students who are Deaf or hard of hearing mainstreamed into regular classes.

The National Technical Institute for The Deaf (NTID) is located in Rochester, New York. The NTID, one of the Rochester Institute of Technology's (RIT) eight colleges is the world's largest and best-known technical college for Deaf students.

Canadian Deaf Schools

There are nine provincial schools for the Deaf in Canada that offer academic and vocational training for Deaf students. All nine of the schools are accessible to the Deaf students because of the use of a Bilingual and Bicultural approach, which enriches their quality of education.

The principle of Bilingual and Bicultural education for Deaf students include:

a) development of literacy skills in ASL and English; b) development of an understanding and appreciation of Deaf culture; c) development of an appreciation of cultural diversity; and d) development of a positive self-image. Deaf role models are an integral component of the Bilingual and Bicultural environment. The bilingual aspect of the philosophy is based on the premise that two languages can be used and respected equally. For educational purposes, this means that ASL is used as the language of instruction in the classroom, and English is learned as a second language. The bicultural nature of this environment gives students the opportunity to be exposed to and develop pride in the language, heritage, history, literature, and values of the Deaf community as well as knowledge of the hearing society, and to develop skills in dealing with the interactions that occur between Deaf and hearing individuals. An atmosphere of mutual respect for the values of Deaf and hearing societies enables the students to function in both environments.

The Sir James Whitney School for the Deaf was founded in 1870 and was the first provincial school for the Deaf in Canada. It was originally known as the Ontario Institution for the Education and Instruction of the Deaf and Dumb. This educational facility is located on a 96 acre campus in the picturesque town of Belleville, overlooking the Bay of Quinte. The Sir James Whitney School for the Deaf officially began implementing its Bilingual and Bicultural program during the 1993-1994 school year.

The Atlantic Provinces Special Education Authority Resource Centre for the Hearing Impaired is now located in Halifax, Nova Scotia. The Resource Centre has been in its present location since 1961, but has roots going back to 1856. Over the school's 140 year history it has been known as the School for the Deaf in Halifax, the Interprovincial School for the Deaf (ISDA), the Atlantic Provinces Resource Centre for the Hearing Handicapped and since 1989, the Atlantic Provinces Special Education Authority Resource Centre for the Hearing Impaired. The Resource Centre provides a broad array of programs, individualized instruction and support for hearing impaired students between the ages of 5 and 21.

Manitoba School for the Deaf is located in Winnipeg, Manitoba. It was opened in October, 1922. It is committed to providing a Bilingual and Bicultural environment to promote academic excellence and emotional, social, intellectual and physical development of school-aged Deaf and hard of hearing children.

The Provincial School for the Deaf in Burnaby, British Columbia is a kindergarten to grade 12 school, in partnership with South Slope Elementary and Burnaby South Secondary schools. Working as a team, members of the Provincial School for the Deaf strive to develop the full learning potential of and a positive self identify within each student. These facilities feature the latest in modern technology and design and are fully accessible to the Deaf.

The Alberta School for the Deaf (ASD) is located in Edmonton, Alberta. The school offers education programs and services for students who are Deaf in grades one through 12 to residents of Alberta. The ASD educators and administrators alike are committed to providing school age Deaf and hard of hearing children with the highest quality of education available.

The Ernest C. Drury School is located in Milton, Ontario, on a ninety four acre campus approximately 60 km west of Toronto. Academic and vocational programs are provided on site

for children aged five to twenty one years who have a severe to profound permanent hearing loss. Home and local instruction is provided to preschool parents and their families.

The Ernest C. Drury School for the Deaf officially began implementing its Bilingual and Bicultural program during the 1990-1991 school year. Whenever possible, classes in the lower grades are team-taught by one Deaf and one hearing teacher, both of whom use ASL as well as English in its written form for communication and instruction. In most of the upper grades there is one teacher, either Deaf or hearing, per classroom.

The Robarts School for the Deaf in London, Ontario was established in 1973. The large, modern buildings are located on a 37 acre campus in the bustling city of London and include preschool, elementary and high school classrooms; recreational and dining facilities; student residences; and a variety of support services. The Robarts School for the Deaf officially began implementing its Bilingual and Bicultural program during the 1993-1994 school year.

MacKay School is located in Montreal, Quebec, committed to having ASL become the language of instruction and developing a Bilingual and Bicultural environment. Their vision for the children is that they will develop bilingual competence in ASL and English through acquisition of expressive and receptive communication skills.

The Newfoundland School for the Deaf is located in St. John's, Newfoundland. It is a residential/day school for 125 students enrolled in kindergarten to Grade 12 with a pre-school program for children under five years of age.

There are many positive things occurring at Deaf schools across Canada. British Columbia and Newfoundland schools for the Deaf incorporate more advanced technologies than other Deaf schools. Approximately 50 percent of the teaching staff at the Alberta School for the Deaf are themselves Deaf. This is a much larger percentage than at any other Deaf school in Canada. As

well Deaf schools are shifting towards allowing more input from the Deaf community, in the forms of advisory boards and committees. This enhances the relationship between the Deaf community and the Deaf schools.

Current Developments Using the Internet and the Email.

Research and development is taking place in three areas. The majority of Deaf individuals experience difficulty with using the Manitoba Relay Service (MRS). The MRS is a 1-800-program in which a third party telephone operator relays telephone communication messages between Deaf and hearing individuals for their personal and business purposes. Though the MRS enables Deaf and hearing people to communicate via telephone, the service is not without its problems. The MRS is very often busy and slow to respond to calls, and its single biggest drawback is that the communication is indirect. Properly used Email will fully incorporate the Deaf individual in the hearing community because both will operate within the writing constraints of Email. On Email, no one knows you are Deaf, as long as you write standard English. This however is a problem, as many Deaf individuals write in a "recognizable" form. Email provides exciting opportunities for Deaf communities around the world. Deaf people have rarely seen their concerns and issues presented in the media, so E-mail allows the worldwide Deaf community almost instantaneous information sharing. E-mail also allows individuals to communicate without identifying their first language; Deaf people can communicate on an even playing field, despite the fact that they use English in a manner that is characteristic of ESL learners. List servers will provide a forum for Deaf Literacy issues, and World-Wide Web and Gopher exploration is available to all.

Technology offers exciting prospects to the Deaf community. Through the use of technology, Deaf people will be able to close the communication gap that presently exists between them and majority society. The concept of transmitting visual information over the telephone lines is an exciting one for Deaf people; it suggests that they will soon be able to use their native language, ASL, over the phone, instead of relying on their second language as a means of communicating over distance. As technological advances become more widespread, they also become more affordable.

One exciting use of technology and its application to the needs of Deaf students is SchoolNet. The Creston SchoolNet is an interactive multimedia network that integrates voice, video and data on tomorrow's information highway. The SchoolNet links individual classroom or entire schools to a central Media Centre which houses numerous multimedia resources. Media resources such as VCR, laserdiscs, and computers can be remotely accessed and controlled on a scheduled basis using a variety of remote controls in the classroom. The SchoolNet also offers a software package which supports a wide range of features and functions including unlimited advanced scheduling of media events, system software available in MS-DOS (IBM), Apple or Microsoft WINDOWS, remote scheduling from classroom controller or computer LAN, interactive on screen display, extensive help menus, courseware database and cataloguing system, view room and view channel functions, master control of all classroom TV monitors, all call and zone paging, master clock synchronization and massaging and E-mail, extensive choice of classroom use controls, supports laserdiscs, CD-interactive, CD-ROM and level 3 Interactive control, supports classroom use with the Laserdiscs Barcode Wand, Lesson manager software and multimedia authoring and supports video teleconferencing and interactive distance learning. Jericho Hill School for the Deaf is now using the SchoolNet in Burnaby, British Columbia and the

Manitoba School for the Deaf is considering installing this kind of system in 1997.

CD-ROM also provides exciting possibilities for Deaf students. *The American Sign Language Dictionary* is a CD-ROM package that allows instant access to video, illustrations and text description for 2200 signs. These signs can be viewed in slow motion or can be manipulated by a number of effects. As well, the package includes practice sessions and games for greater retention. It is based on the best selling *American Sign Language(ASL)* series by Martin Sternberg

Deaf World Web is the largest and leading multi-purpose Deaf-related Website, providing information on all subjects from Socio-Cultural Resources to References around the world. The Deaf World Web is an international Web publication of the Deaf and a central Deaf point on the Internet that includes Information Centre: DWW News, Search, Email and User Guide. Another section is Social-Cultural Resources, consisting of English, products and services, Deaf Cyberkids, Discussions and Chats. The last section is Reference and Directory consists of a Deaf Email directory and list. Gopher has menu of Deaf resources in the State of Michigan, and using the keywords: Physical Disability, Deaf and Health. The site is located at Michigan State University targets for Deaf and disabled consumers, Health Professionals, Activists, Advocates, Policy Makers, Rehabilitation Counsellors and Therapists. The profile includes a menu of Deaf resources that has a collection of files in essay and report form about a variety of historical and cultural aspects of deafness.

Technology today plays a potentially important role in the Deaf community; however, there are few members of the Deaf community who have access to the technology. It is critical to explore the potential of information technology in the near future, as it could radically change programs and curricula in Winnipeg, as well as across Canada and in other countries.

Chapter Summary

This chapter provided an overview of Deaf education from an historical perspective. Second, an examination of current programs across Canada and the United States was provided. Third, critical research was summarized. Fourth, Internet activity was explained. The next chapter will explain the procedure for data collection and participants.

CHAPTER III

METHODOLOGY

In this chapter, I provide a delineated description of the general methods of the study. In the first section, I describe the survey questions used to collect the data. The second section describes the selection of the participation and explains the purposeful sampling procedure used. The third section focuses on ethics issues.

The Survey Questions

The ethics review process of University of Manitoba includes the protection of the rights, safety, and dignity of research participants. The survey instrument was developed by the researcher, John Gibson, then was approved by the University of Manitoba's Faculty of Education Research and Ethics Committee in July, 1995. Also the researcher wanted to ensure that he followed the policy of the University of Manitoba, in that all research to involving human subjects in any way, be reviewed and judged as to its conformity to relevant ethical standards and guidelines and to carry out the reviews without undue delays. (University of Manitoba Ethics Review, 1994, p. 1). The survey questions were examined and evaluated to avoid ambiguities and discriminatory statements. The three focuses of the survey instruments were to determine (1) whether the goals of current students in the Deaf Literacy Program (DLP) at Red River Community College (RRCC) were met by participating in the program, (2) how well the learning environment and instruction of the DLP matched the needs of current students, and (3) how well the available technologies, computers and software programs match the needs of current students at the DLP.

More specifically, four research questions were identified:

1. What are demographics of the participants?
2. What do Deaf students enrolled in this program perceive their needs are in a literacy program?
3. Is the Deaf Literacy Program at RRCC congruent with students stated needs?
4. How is current information technology being used in the delivery of the DLP?

The study utilized 24 survey questions. The demographics questions (# 1 to # 7) provided general personal data on the respondents. The Needs questions, questions # 8 to # 11, explored students' perceived needs as they identified their personal goals and options for learning ESL and retraining for work and home environments. The congruency questions (# 12 to # 18) established the relationship between what the students acquired and what the students wanted. Technology questions focused on the current impact of technology for Deaf students in Manitoba in questions # 19 to # 24.

Participants There were thirty-five active DLP students in the program participating both in classes (Tuesday evening, Thursday afternoon and Thursday evening) and in one to one tutoring. The researcher randomly selected seven participants from the pool of 35 DLP students as was approved by the thesis committee members, as this was seen to be capable of being managed in a timely fashion without compromising the integrity of the data collected from the sample population.

Purposeful Sampling Participants selected for the study were chosen on the basis of the following characteristics: (1) They were to be fluent in American Sign Language, (2) They must be over 16 years old.

(3) they were able to demonstrate their motivation and desire to develop their English reading and writing skills for personal and professional development and, they were culturally Deaf.

Data Collection The researcher conducted interviews with each participant. These interviews lasted approximately one to two hours and were videotaped and then translated from ASL to written English for the purpose of data analysis. Participants reviewed these translations to ensure the accuracy of their comments. The researcher asked the students if they were available for either an afternoon or evening interview, since some of them were employed during the day.

Location of the Study The surveys were conducted either at Red River Community College or in participants' homes. Allowing participants the option of where the interview took place allowed them a better sense of control. Three participants were interviewed at Red River Community College and four participants were interviewed in their homes.

Ethics The researcher informed each of the students that their comments would be kept confidential. Participants were told that their responses would help the researchers to design and revise the future literacy program and to develop generalized learning objectives. Anonymity was maintained in the written translations by assigning the students pseudonyms. Videotapes were stored in a secure place and will be erased immediately after the publication of this thesis. The researcher attempted to make the students as comfortable as possible by maintaining an informal interview process. Students were allowed to take as much time as they needed to answer questions, which helped to make the process less stressful. Finally, students were also asked to sign a form authorizing the disclosure or release of information gathered in the study.

Researcher Role The researcher established expectations for both the researcher and the participant, by clarifying their respective roles in order to avoid conflicts or confusion. It was important for the researcher to act neutrally and professionally when he interviewed the participants, in this study in particular, because the researcher was the instructor from the program where these participants attended. It was important that biases were minimized between the researcher and the participants, given the researcher/instructor role. If the participants gave negative criticism, and were not satisfied with the DLP, the researcher recorded the participants' responses to the questions. A barrier may occur between the researcher/instructor and the participants if the participants felt uncomfortable at the time. Perhaps the participants were concerned that they might be disciplined by the instructor as result of the criticism to the researcher. The researcher's responsibility was to inform the participants that the interview will not affect the participant's involvement in the program. A potential bias may occur if the participants approach to the survey questions, choosing to give the researcher full responses due to the level of comfortableness. It is important to clarify the roles of researcher and instructor to the participants in order to create a risk-free environment for the participants.

The researcher explained the content of the research instrument and the purpose of the interview process, questions, and surveys or questionnaires. The participant has her or his own right to gain knowledge about what the researcher is doing to the participant. Also, the participant can determine answers to these questions more easily because they will have had the content of the instruments explained to them. The researcher is not supposed to give any undue stress or hardship to the participant in the research process. It must be risk a free environment, and there should be a harmonious relationship between them. The researcher should not expose the participant to inappropriate or unnecessary and unethical interview questions. The researcher

must be careful to develop appropriate materials for giving interview questions or for the instruments following the code of ethics. Finally, the researcher must respect the participant's valuable time when interview the participant. Also the researcher must organize the interview process and must be ready to give the participant the instruments on time.

The researcher must notify the participant about the purpose of the experiment so the participant can understand the process. The participant has the right to know what the research is being used for. The researcher must give written or verbal feedback to the participant after interviewing when they ask formally for the researcher to give feedback. This may be beneficial for participants to know the outcome of the data analysis, or results. The researcher must give honest answers to the participant when they want to have some feedback or ask questions to the researcher.

Chapter Summary

This chapter provided a description of methodology included identification of participants, sampling procedure, data collection, researcher role, ethics, and location of the study Chapter four will discuss the outcomes of the seven videotaped interviews , and provide a summary and interpretation of interviews.

CHAPTER IV

DATA ANALYSIS

Introduction

This chapter provides the twenty-four questions that were asked of the seven participants in the video-taped interviews and provides an interpretation of the responses. The twenty-four questions were grouped into four categories, those being Demographics, and the three research of Needs, Congruency and Technology. Each question is summarized below with an interpretation of the participants' responses. The responses printed here are a translation of the original ASL responses.

Interview Questions, summary, and Interpretation of Data

Question 1: Are you culturally Deaf, deaf or Hard of Hearing?

A *culturally Deaf* person is someone who identifies himself/herself as a member of the Deaf community, uses ASL, and ascribes to the values, rules of behaviour, and norms of the Deaf community. A *deaf* person is someone with a serious to profound hearing loss but who does not identify himself with the Deaf community. An *oral deaf* person is someone with a serious to profound hearing loss but relies solely on his auditory abilities and does not necessarily associate with the Deaf community. A *hard of hearing* person is someone who has some loss of hearing but identifies with the majority hearing culture.

Summary. Five out of the seven participants identified themselves as culturally Deaf. The other two of the participants did not consider ASL as their first language.

Interpretation of Data. Five of the seven, or the large majority, of the participants considered themselves to be culturally Deaf. These participants were fluent in ASL and attended the Manitoba School for the Deaf, where they interacted with culturally Deaf people and used American Sign Language socially and perhaps, educationally and therefore identified themselves as culturally Deaf. Two participants were not fluent in ASL because they came from other linguistic backgrounds. The one participant is French-Canadian, raised in Montreal, and used Langue des Signes Québécois as a native language. The other participant is Mexican and was not fluent in ASL when he immigrated to Canada several years ago. His first mode of communication was a system of gestures combined with some formal Mexican Sign Language, but this participant learned and used ASL to acquire English as his third language.

Question 2: What is your present educational level?

This question was designed to determine the participants' highest level of education, with a focus on secondary and post-secondary achievement.

Summary. The participants in the study have a wide variety of educational levels. Two of them left secondary school before graduating. Five participants completed their secondary schooling. Of the five, one has a Masters of Deaf Education degree and is currently teaching at the Manitoba School for the Deaf. Another participant has received formal training and has attained a Scuba Diving Instructor Certificate. This same person is currently attending Red River Community College, enrolled in first year studies as a Computer technician.

Interpretation of Data. The responses to question 2 revealed the modest educational backgrounds of the seven participants. It is noteworthy that only one participant continued with postsecondary education in this group. The participants stated that they require greater

competency in English before they consider enrolling in courses at a college or university level. This accurately reflects the literacy struggles of the Deaf community and emphasizes that there is a certain degree of competency in English, in particular, English as a second language that is required before one is able to succeed in a postsecondary environment. Trybus (1978) discusses data obtained from nation-wide studies of the Standard Achievement Test (SAT) scores of hearing impaired students. He notes the median score of 19 -year-old hearing impaired school-leavers is at the 4th grade level as compared to a 10th grade level for hearing children (Trybus, 1978 as cited in Carver, 1989, p.8).

Question 3: What is your gender?

Summary. There were four males and three females in the sample.

Question 4: How long have you been a DLP student?

Summary. The study included participants who had been in the program for a relatively long time as well as students who had just entered the program. Five participants had been in the program for approximately five years and two students had just entered the program.

Question 5: When did you start to participate in the DLP?

The question asked the participants when, specifically, they enrolled in the program.

Summary. Four of the participants began early after the program's inception, that is, between January 1991 and February 1992. One participant enrolled in 1993 and the remaining two participants enrolled in February and September of 1995. Of the participants in this study, two indicated that they were not continuing in the program. Five of the participants continued in

the program, committed to furthering their reading and writing learning which was dependent on their capacity to acquire English and their own learning styles and time.

Question 6: Tell us about your involvement in Deaf organizations and the Winnipeg Community Centre of the Deaf?

This question asked the participants about their membership in Deaf organizations and helped to determine their interests and knowledge of Deaf community issues.

Summary. All of the participants were active members of the Winnipeg Community Centre of the Deaf and were involved in a variety of Deaf community organizations.

Interpretation of Data. All of the participants were active members of Winnipeg Community Centre of the Deaf, the principal political, social and advocacy organization of Deaf Manitobans. They were also involved in other organizations such as church activities, Deaf school activities and interpreting service within the Deaf community. Three of the participants were actively involved with the Manitoba School for the Deaf and stated that they did so because they value improving the Deaf education system and would like to provide Deaf students with positive role models. Of this group, one is a parent of two Deaf children who was an active member of the Advisory Council for School Leadership and the other two sat on the school's Bilingual and Bicultural Committee. The Deaf parent was active on the Council so as to ensure that the children are in a risk-free learning environment and receive a good education. Of these same three participants, one of them also sat on the Board of Directors for the Independent Interpreter Referral Service as a means of ensuring that the service met the Deaf community's needs. Two of the other participants were active members of the Catholic Church for the Deaf. All of the participants attended Deaf community social events and felt that socializing in the Deaf

community was a much needed opportunity to share information and receive support, particularly because most of them worked in non-Deaf environments.

Question 7: What are your personal and employment goals?

This question asked participants about their personal and employment goals and was used to determine if the DLP can help the students' literacy needs in the home and work environments.

Summary. Four of the participants were employed, two were unemployed and one was a full time student at Red River Community College. Some of the participants wanted to simply retire from their present occupations while others hoped to attain challenging employment or make their current employment more satisfactory. Another participant wanted to continue as a teacher in a preschool setting but wanted to create more challenges for himself.

Interpretation of Data. Four of the seven participants were employed. When Deaf people are employed, they are often under-employed. Two of the employed participants expected to maintain their current employment setting until retirement. They did not have good opportunities to receive promotions or move on to other jobs. One participant was not certain about long term goals, but wanted to maintain her current employment. The other employed participant would like to be more challenged in his teaching career, but truly enjoys teaching preschool children and did not indicate a desire to seek other employment. One participant hoped to become an accountant or a payroll clerk, but recognized the need for formal training and a certificate in order to become employed, given the current labour market. The other two participants wanted to start their own businesses; one wanted to open a restaurant and the participant enrolled in college intended to graduate as a computer technician and soon to start a computer service business. He also had aspirations of continuing with his education and perhaps later becoming an engineer.

Question 8: Why do you want to be in the DLP?

This question asked the participants why they wanted to enroll in the DLP and was used to determine their needs and learning objectives.

Summary. All of the participants wanted to improve their written English skills in order to communicate more effectively with hearing people in their home and work environments. Some of them also wanted to become more confident in their abilities to communicate effectively in a majority hearing society.

Interpretation of Data. The participants stated that they were enrolled in the DLP because it was a means of attaining something very important to them, that is, improving their writing skills so as to communicate more effectively in their home and work environments. *Cultural literacy* is a relatively new concept that is applicable to the Deaf community's situation as its members strive to become more confident in their abilities to write and communicate in society. All the participants sought to enhance their ability to use English syntax. Most of the participants experienced difficulty with English idioms. Idioms are not conceptual in a literal manner and do not translate well into ASL and therefore are not easily understood by Deaf people. One participant had to learn ESL to communicate with his family and believed this to be the key to securing employment. Two participants felt their English skill level was not adequate for the tasks required of them in their employment, and they were not always comfortable seeking assistance from co-workers. These two participants preferred to complete written English DLP classroom assignments at their own pace, and so wanted to be able to see the program instructors for assistance on an ad hoc individual basis.

Question 9: How do you best learn ESL, through group situations or one to one tutoring?

This question determines the participants' experiences and preferences in regard to class situations and one to one tutoring.

Summary. Most of the participants learned ESL through both, DLP classes and one to one tutoring.

Interpretation of Data. Based on the responses to question 9, the participants learned ESL by participating in the DLP class and one to one tutoring, though the tutorial format was favoured. The classroom setting was designed for students to interact and to share information based on their collaborative learning goals while the one to one tutoring is more individualized and is a private setting for the students.

Written English was presented by means of an overhead projector or a white board, given that the participants benefitted in seeing the written English and having the instructors explain it in ASL. This then generated class discussion and facilitated the participants' learning from other students in the DLP class. They enjoyed the knowledge they received from other students' shared information, but this also provided an opportunity for the participants to seek assistance from other students if they did not understand the instructor. In addition, participants received some personalized feedback from instructors and other students on their writing and grammar skills. Participants stated that, because the DLP class could have students with a wide variety of English skills and abilities, they preferred to work with an instructor in a tutoring setting when they had a particular difficulty with some aspect of written English. The participants stated that they also wished to meet with the DLP instructors in a tutoring fashion when they had to deal, in English, with things of a personal nature.

Question 10: How can the DLP improve your ESL skills for your home and work environment?

This question was designed to assess whether the DLP develops the participants' ability to use written English in their home and work environments.

Summary. Participants reported more confidence in communicating in written English with hearing people in home, work and social environments because they were learning vocabulary that dealt with relevant daily topics.

Interpretation of Data. The participants commented that the DLP was improving their ESL skills by providing them with vocabulary that was pertinent to their home and work environments, as well as their social lives. The participants noted that they were retaining much of the new vocabulary learned in class and, hence, were able to use it outside of class. The newly acquired vocabulary had appreciably improved the quality of their communication skills and confidence when communicating with hearing people. For some, this comment was made as a direct result of hearing co-workers having noticed an improvement in their writing skills. One of the participants noted increased confidence in writing school report cards.

Question 11: What reading and writing task(s) do you find difficult in the DLP?

This question asked participants about reading or writing tasks which they perceived as challenging, and provided an opportunity for them to list their strengths and weaknesses.

Summary. Most of the participants gave responses which outlined their difficulties with specific writing skills, principally, the grammar and syntactic structures of English, and the use of idioms.

Interpretation of Data. Most of the participants were challenged by the grammatical and syntactic structures of English but that they wanted to persist in learning English in order to

communicate more effectively in writing with people in the home and work environments to be more confident that others could read what they as Deaf people had written. As ESL learners, the participants struggled immensely with English word order and idioms. The participants struggled with word order, in particular, due to the vast difference between ASL and English syntax. The fact that ASL has no written form poses a special problem for Deaf ESL users in that they are not able to rely on their own language's written form in the manner that other ESL users might. One participant felt that grammatical intrusions from their native ASL made it difficult to acquire new English structures. It was interesting that one of the participants expressed that it was easier to learn the word order of French than that of English. Perhaps this is because French is more similar grammatically to ASL than is English. However, a linguist in the Linguistic Research Laboratory at Gallaudet College studied these sign relationships and found that only approximately 60% of the signs in American Sign Language seemed to be related to signs in French Sign Language. Although we know that languages change over time and that the last 150 years could account for some of these differences, there is still much more dissimilarity than can be accounted for by natural processes of language change. That remaining 40% must have come from somewhere else. (Woodward, 1978 as cited in Baker & Cokely, 1980, p.52). Articles, definite and indefinite, posed particular problems for Deaf people because some of the rules which govern their usage are sound-based such as vowel and constant sounds or syllables. This is considered as a common problem for most ESL learners. Most of the participants felt that they still had a great deal to learn about technical and academic vocabulary.

Question 12: Do you agree that DLP should continue to use ASL in the classroom as the language of instruction and communication?

The question asked the participants if they supported the use of ASL as the language of communication and instruction in the DLP classroom and was intended to assess whether they believed it was of merit.

Summary. The participants unanimously supported the use of ASL in the classroom as the language of instruction and communication.

Interpretation of Data. The participants unanimously endorsed the use of ASL in the classroom as the language of instruction and communication and provided several reasons. The Deaf students felt less stressed using their natural language to communicate and interact in the program. They replied that using ASL reduces misunderstandings and ensures clear communication. This contrasted with the secondary education experiences of most of the participants. Instruction had not been in ASL, but rather, the majority of the participants had received instruction in either spoken English or signed versions of English. As a result, they had not always received the full benefit of what they had been taught. Consequently, one participant demanded that the DLP instructors be knowledgeable about Deaf culture and ASL sociolinguistics. One participant taught in a preschool program that used ASL as the language of instruction and remarked that the philosophies of the program in which he taught and the DLP were similar. One of the participants noted a sense of empowerment when ASL was used in the classroom, which in turn facilitated quicker and more complete learning.

Question 13: Do you feel your literacy needs were satisfied in the DLP?

This question asked whether or not the participants felt that the DLP satisfied their needs and is used to determine aspects of the program that could be modified and thereby improved.

Summary. The participants stated that, generally, the DLP met their literacy needs. They realistically met their learning goals and still were not satisfied with the outdated DLP computers. They were also aware that they still struggled to challenge the English as they are ESL learners.

Interpretation of Data. The responses to question 13 indicate that all of the participants did meet their literacy needs in the DLP, but some participants expressed receiving more benefit from one to one tutoring than from the classes. One participant expressed dissatisfaction with the program because of a personal desire to devote more time to the development of his ESL skills than the three hours per week allowed. A number of participants felt that the computers in the DLP computer lab were outdated and needed to be updated or replaced in order to take advantage of the internet and Email. In addition, participants expressed the need for a computer literacy class as an option in the DLP so as to enable them to compete in an increasingly technological society. One participant, during the interview, stated that "*DLP computer outdated need update, want better technological computer to catch up current technology, prefer female instructor too, can feel comfortable, could express personal feeling, couldn't deal with male instructor.*" (transcribed directly from videotaped, ASL interview). One participant felt that he was unable to learn adequately from a hearing instructor because the instructor was not a native ASL signer. In support of this participant's comment, is the fact that other participants noted that having two Deaf instructors offered a more challenging and exciting program. Finally, some participants expressed the need for the DLP to hire a female instructor so that the program would be more sensitive to the needs of female Deaf learners.

Question 14: How well does the DLP meet your needs?

This question was designed to ascertain the degree to which the participants' needs were satisfied by their involvement with the DLP.

Summary. All of the participants stated that their needs were met and some went on to add that the DLP class was good but that the one to one tutoring was excellent.

Interpretation of Data. Based on the participants' responses, the DLP program adequately met their needs and they were satisfied with the instructors' attitude and approach to tutoring and classroom instruction. One participant said that the program had been acceptable when it had a team comprising of one Deaf and one hearing instructor but that it had a greater impact with two Deaf instructors. Traditionally, hearing people have taken the positions of administrators and instructors in the Deaf education system. One participant was really impressed that the DLP instructors were very flexible when it came to meeting students' needs and that they were very respectful toward the students. It was felt that this helped to give the students a feeling of empowerment and a sense of ownership for the program. This participant said that without this respect, the program would not be reputable in the Deaf community. One of the participants said she cherished the program and felt it continued to be worthwhile for her and that it was very important for Deaf people to learn ESL in order to communicate effectively with hearing people in home and work environments. One participant, though stated that the DLP met his needs, wished to have more individual access to an instructor in order to meet his language goals. The participant stated that the "*DLP historically none now established DLP impressed feel cherished to me keep attend, learn by ten minutes does not matter learn three hours feel critical*" (transcribed directly from videotaped, ASL interview).

Question 15: If you became the DLP instructor, what major changes would you make to the DLP?

This question is designed to determine what major changes the participants would make to the program, if any.

Summary. The single most significant change that the participants said they would make to the DLP is to add a computer literacy component because they believed that using computers is an important aspect of their lives. Computer literacy in programs such as Word Perfect 6.0 were mentioned specifically.

Interpretation of Data. The single, greatest change that the participants would evoke in the DLP would be to incorporate a computer literacy component. Computers were perceived as something that could be a very significant part of their lives. The participants suggested that the DLP provide short courses in a variety of computer applications that the students could use in their home and work environments. The word processing software Word Perfect 6.0 was mentioned repeatedly. They believed that this was a way of equalizing Deaf and hearing people's abilities to write English and that this would enhance their ability to compete in a hearing world. The participants frequently mentioned that the computers that were in the DLP lab need to be upgraded. It was suggested that the instructors should provide the Deaf community with more information about the content of the classes and that this would, in essence, help to recruit students. One of the participants expressed empathy for the DLP instructors because of the fact that it was sometimes awkward for them to follow RRCC policy. This participant felt that the instructors should be able to make their own policies in accordance with the needs of the DLP students. The participants emphasized that an instructor with a friendly attitude and a positive classroom environment was critical to them in that this removed barriers and roadblocks to their

learning, and importantly, they emphasized that the DLP possessed these rare qualities. One participant, however, felt that having the same instructors for a long period of time made it more difficult for him to learn, and that, when comparing the DLP to other academic or educational programs, it proved unusual for students to have the same instructor for a period of four years. He stated that he believed he would be more challenged and motivated if the program were to hire a new instructor. Another participant said that the instructors should be more assertive and encourage the students to be more responsible with their homework as well as insisting that the students bring some of their own work to class. One participant felt that the program should have a Deaf administrator to supervise the instructors so that the students could share their concerns and problems more comfortably in their native language rather than having to deal with a hearing administrator. Of significance, is the fact that all seven of the participants emphasized that the one aspect of the program they would not alter was the use of ASL as the language of instruction and communication in the classroom. The participants supported the discussion sessions which occurred in ASL at the beginning of each class and facilitated information sharing among the students.

Question 16: Do you prefer day or evening times for DLP classes and tutoring?

This question asked the participants whether they preferred the daytime or evenings for classes and tutoring and was designed to assist in determining whether or not to expand classes or tutoring times to suit the students' needs.

Summary. All of the participants preferred to have classes offered in the evening, yet most of them believed that the one to one tutoring sessions should be provided throughout the day and evenings when classes are not scheduled.

Interpretation of Data. All of the seven participants preferred evenings for the DLP classes. Those who were employed needed to attend the class during the evening, yet even the full-time student and the unemployed participants preferred evening classes. Attendance at classes depended on the participants' work schedules and commitments to family and other activities. One participant commented that the DLP offered a daytime class and its enrollment was small. This was in contrast to the multiple offerings of evening classes which were, for the most part, very well attended. This participant believed that this accurately reflected a higher demand for evening programming than daytime programming in the Deaf community. Another participant suggested that his workplace should provide time-off during the work day to access the DLP's services to complete English-based, work-related tasks because he perceived it to be unjust for him to sacrifice his personal time with his family and the Deaf community in order to perform such duties.

Four participants also preferred evenings for tutoring because they were employed during the day. The one participant who is a full-time day student and the ones who are not employed still preferred the evenings for one to one tutoring.

Question 17: Which do you prefer: Fall, Winter, Spring or Summer sessions for the DLP?

This question asked the participants their preference of Fall, Winter, Spring or Summer sessions and was to assist in determining how the program should schedule classes. This question allowed the researcher to gather specific data regarding interest in a Summer session.

Summary. All of the participants preferred Fall, Winter and Spring sessions only.

Interpretation of Data. The participants responded that they preferred Fall, Winter and Spring sessions and that there was no interest in the Summer session because of a desire to have

an academic break through that season. One participant felt there would not even be enough interest in the broader Deaf community to fill a course offering of a literacy Summer session. The participant added that the DLP instructors typically took summer vacation, just as the other college instructors did, and that it would be difficult to recruit competent instructors for such a brief session. All of the participants noted that the Summer session would pose problems for students who depended on summer employment.

Question 18: Which location do you feel suitable for your learning environment?

The question is designed to find the participants' preference of location in which to house the program.

Summary. The participants selected Red River Community College as their preferred location for the DLP.

Interpretation of Data. The participants endorsed Red River Community College as the location in which the DLP should be housed. They stated that RRCC was a good choice because it offered a range of services including: ESL resources, library, cafeteria, maintained LAN computers, classroom availability, and convenient access by public transportation at the RRCC. Participants commented that Deaf Centre Manitoba was not considered a good choice for housing the program because it was viewed as being a place where Deaf people interacted socially and RRCC was the place where Deaf people went for academic purposes. The participants felt that if the program was housed in the DCM, they would lose some of their privacy and they feared they would be judged by the Deaf community as not being intelligent based on the fact they were attending a literacy program. One participant believed, "*me learning environment suitable at RRCC why RRCC college relevant to employment issues. DCM for purpose of social interaction*

can tempt or disorientated at DCM, separate from social, RRCC more suitable for group discussion,” (transcribed directly from videotaped, ASL interview). One participant suggested that it would be nice if there was a university in Winnipeg which was operated on a national scale as an academic institution for all Deaf Canadians. Moreover, RRCC has a Continuing Education adult program which offers ESL courses, and hence, some participants believed that DLP students would feel proud that the program in which they were enrolled was similar to many programs offered to the hearing community. One participant noted that the RRCC downtown campus would perhaps be even more convenient for the DLP. One participant suggested that the DLP should offer tutoring in students’ homes as this would more effectively allow a student to focus on specific literacy issues pertaining to the home and work environments. This participant believed that an added benefit of implementing home tutoring would be that this would provide a good example to Deaf family members, and be a good opportunity for enhancing family literacy skills. This form of literacy training is relatively new to the Canadian Deaf community, but it is important for the DLP to remain flexible in its efforts to meet the needs of its students.

Question 19: Do you have access to a computer at home or work?

The question asked the participants if they have a computer at home as a means of determining if the program should make computer literacy a priority.

Summary. Two participants have home computers while some of the others have access to computers at work.

Interpretation of Data. Two participants have home computers while a few others have access to computers at work. One participant has computers both at home and at school. As a full-time student in a computer-based program, the home computer is used for assignments. One

of the participants has access to an Apple computer at work that is used for teaching preschool children. Several of the participants stated that they would possibly purchase home computers if they were to become more familiar with various computer applications while in the DLP. One participant in particular stated that he would prefer to learn about computers through demonstration and hands-on experience in the DLP. One participant felt that he could be more computer literate if programs were not revised so frequently. The same participant felt that hearing people had more opportunities to become computer literate than Deaf people because they had easier access to information about the latest in computer technology and programs because they are fluent in English, which is the language used to communicate on and about computers. Moreover, there are very few Deaf people who work as computer technicians or programmers in the Deaf community who can act as resource people.

Question 20: Do you consider yourself computer literate?

This question was designed to determine whether or not the participants were knowledgeable about computers.

Summary. Four participants considered themselves computer literate because they were familiar with computer programs.

Interpretation of Data. Four of the participants considered themselves computer literate because they could use program applications such as Word Perfect. One participant considered himself to be very computer literate because he had extensive experience with computers and was enrolled in a two-year, computer-based program at RRCC. Some of the participants commented that they were now confronted with a world of rapidly advancing technology and were resigned to taking some form of computer literacy program.

Question 21: Are you aware of the Deaf gopher and World Wide Web?

Summary. Two participants knew about Deaf gopher and World Wide Web. Five did not know about the internet.

Interpretation of Data. Only two participants knew about Deaf gopher and the World Wide Web while the other five did not know about the internet. The participants stated that they had received only limited information about the internet from the DLP and other sources, but they expressed a desire to continue learning about it because of its communication potential for Deaf people. The single, largest barrier that the participants noted was the lack of home computers owned by Deaf people. Some participants commented that it would be nice if the government could provide financial assistance for Deaf people to purchase computers in the same manner that the Manitoba Health Services Commission offers a rebate to Deaf people who purchase special telephone communication devices, known as a TTY. It was believed that this would make a tremendous impact on the number of Deaf people accessing the internet. One participant planned to create his own homepage and use it to keep in contact with his Deaf friends at an American technical college. One participant had seen students discussing the internet but had never seen a "web site".

Question 22: Do you use Email?

Summary. One participant had access to, and used Email.

Interpretation of Data. Of the seven participants, only one used Email. He used Email for contacting friends and relatives. That same participant was also aware of Deaf list servers and Deaf forums. All of the other six participants did not have access to Email accounts, and therefore had never used Email, though all felt that it would be an invaluable tool.

Question 23: How often do you use it? (daily, weekly, monthly)

Summary. This question was relevant to only the one participant based on the responses to the previous question.

Interpretation of Data. The sole participant, for whom this question was relevant, indicated that he used Email daily. This question was not applicable to the rest of the participants.

Question 24: Do you think that Email will be a good tool for developing your writing skills?

Summary. All of the participants believed that Email would be an asset in the development of their writing skills.

Interpretation of Data. All of the participants believed that Email would be a good tool for enhancing their writing skills by modelling a variety of written English and providing increased exposure to the language resulting in an increased confidence in their own writing abilities. Two participants specifically mentioned that the use of Email would provide excellent models of English grammar and syntax. Another participant said that Email would be an effective tool for him, but at this time, it would still have to be messages that were written in simple and clear English. He also mentioned that he viewed the TTY as similar to Email in that it is an electronic communication medium that exposes one to a variety of writing samples and that he could develop a sense of increased confidence in his writing skills through either medium of technology. He went on to mention that if he was exposed to Email, this would assist him with editing his own written English work more effectively and efficiently than doing it on paper. He stated, "*daily use Email can identify wrong English grammar, can edit/change English, use Email daily, can increase writing skill*" (transcribed directly from videotaped, ASL interview). One participant admitted that she must first learn how to use a computer before being able to benefit from Email,

but thinks that it would be an effective tool in helping her develop her writing skills. A final participant felt that Email would be most beneficial if it were used daily.

General Analysis of the Research Questions

The questions in this survey were grouped around three main themes: Needs, Congruency, and Technology. It is now appropriate to re-state the research questions and provide a summary response.

Research Question 1 asked “ What do DLP students perceive their needs are in a literacy program?” Responses to questions 7-12 indicated that the students of the DLP program had a clear awareness of what their needs were and what they expected to get out of the program. The principle need of the students was to improve the competency of their second language, English, so as to be able to communicate effectively and confidently in home and work environments. They wanted to also be able to have access to, and appreciate, the print medium in order to keep abreast of the political and social issues of the world, which are as paramount in the lives of Deaf people as they are in the lives of hearing people. For many, the desire for increased English literacy was motivated by the goal of being able to attain a job promotion or a postsecondary degree or diploma at some future time.

Research Question 2 asked “Does the Deaf Literacy Program deliver programming that meets its student needs?” (Congruency) Responses to questions 13-18 showed that the current DLP program is meeting the students’ needs. The results revealed that the one to one tutoring program is viewed as more beneficial than the DLP class, though its merits were extolled. The evening program was in more demand than the daytime program, which is consistent with what was occurring. Some of the interview participants were of the opinion that the program should be

relocated to a more central location within the city, the RRCC downtown campus, and that this easily accessed location would make it more convenient for some students. Based on the comments, there would be merit to having a female instructor in the program. The outdated computers were deemed to be of minimal value to the program.

Research Question 3 asked “How is current information technology being used in the delivery of the DLP?” (Technology) Responses to questions 20-24 focused on issues of technology. In particular, it became obvious that the DLP does not use technology to any degree, and that this dimension is clearly lacking. Some students nevertheless, considered themselves computer literate, while others were not. Only one out of seven participants had access to a home computer. All felt that the computer would become an essential tool in the near future and wanted the DLP to develop its program paying particular attention to the varied functions technology might play in the education of Deaf individuals. All were aware that technology could be a major equalizer, which would truly empower Deaf individuals as never before. Nevertheless, participants who did not use computers did not seem to know precisely how to get started.

Conclusion

The analysis and discussion of the study's data are possible because of the great input from these participants. The responses to questions about educational backgrounds and personal data are representative of a typical demographic cross-section of the Deaf community. The research question focussing on Needs, resulted in a consistent response from the participants in that they all desired to improve their written English skills in order to communicate more effectively in home and work environments. The Congruency question yielded a divergence of opinion. Though all of the students valued the DLP experience, some were still dissatisfied with the level of their

achievement thus far. Most of the participants were satisfied with the DLP being located at the main RRCC campus, but it was mentioned that the downtown campus might have been more convenient for some students. The absence of a female instructor in the DLP was noted. It was believed that a female instructor would provide a different perspective as well as degree of comfort and a sense of equality for some students. The final question, Technology, highlighted the fact that Deaf students were frustrated in their attempts to keep abreast of rapidly changing technology, despite their awareness of the important equalizing potential possessed by computers. Computer literacy was seen as the avenue by which Deaf people could compete on an equal basis with hearing people.

Chapter Summary

This chapter summarizes all of the comments from the participants and provides an interpretation of the data by the researcher. Chapter five will incorporate into its conclusion a list of critical comments by the participants, recommendations from the researcher, and possible future implications for the Deaf literacy movement locally and nationally.

CHAPTER V

SUMMARY AND CONCLUSION

This fifth chapter will summarize chapters one to four, and provide a synopsis of the study's findings, discuss possible implications for the Deaf literacy movement, gather a list of recommendations from the researcher, and recommend other areas of potential research.

Overview of the Study

Chapter one introduced the Deaf Literacy Program (DLP), located at Red River Community College (RRCC) in Winnipeg, Manitoba. The DLP was unique in that it is believed to be the only literacy program in Canada, and possibly North America, that used a community-based program model. The chapter went on to explain American Sign Language (ASL), aspects of Deaf culture, the importance of a Bilingual and Bicultural philosophy, specific problems of the Deaf community in Manitoba, and it also outlined the three research questions.

In its overview of the DLP program, the chapter explained the Bilingual and Bicultural philosophy that the DLP ascribed to, as one that respected both ASL, as Deaf people's native language, and English as their second language. In the program, ASL was the language of instruction and communication, and English was being taught to the Deaf students as a second language. The Bilingual and Bicultural philosophy is a movement away from the traditional philosophy of how Deaf people were educated, towards one that respects, accepts, and incorporates ASL as a method of acquiring English literacy. The principle element of the Bicultural philosophy is that hearing and Deaf individuals are to be viewed merely as different, thereby encouraging increased cross-cultural awareness and reducing cross-cultural conflicts. An important element of the DLP was the incorporation of Padden's (1980) five aspects of Deaf

culture: American Sign Language (ASL), values, rules of behaviour, traditions, and the essence of one's identity regardless of whether it be as Deaf, deaf, oral deaf, or hard of hearing. This information was a part of the curriculum so that students could develop their own awareness of Deaf culture and be better able to educate others.

As put forth in chapter one, there are four specific problems of the Deaf community in Manitoba. These are that Deaf people were not yet proficient in English upon completion of their secondary education; Deaf people did not have access to regular ESL instruction; the DLP students did not feel that the program was meeting their needs based on their outcome; and lastly, the DLP needed to respond to radically changing technology.

From this information, three research questions were identified. These questions are (1) What do Deaf students enrolled in this program perceive their needs to be? (2) Is the DLP program at RRCC congruent with stated students needs? (3) How is current information technology used in the DLP? To answer these, twenty-four questions were developed to investigate the four categories of Demographics, Needs, Congruency, and Technology.

Chapter two provided an historical perspective of the education of Deaf people, discussed contemporary developments, and provided a synopsis of programs available to Deaf students in colleges and universities throughout Canada and the USA. It surveyed the Deaf adult literacy programs in Canada and included a proposal by the Canadian Association of the Deaf. The chapter also discussed current technological developments.

Chapter three described the general methods of the study by describing the survey questions, the collection of the data, the selection of the participants so as to provide a purposeful sampling, discussion of the procedures indicating a knowledge of ethics regarding the roles of the participants and researcher.

Chapter four contained the substance of the study. In this chapter, the data collected through participant interviews was analyzed and interpreted by the researcher.

Conclusion

This thesis was designed to investigate the problems confronting Deaf Manitobans as specified in chapter one. The breadth of the problems in regard to a lack of English proficiency upon completion of secondary education, and the inappropriateness of the placement of Deaf adults in regular ESL programs was too vast to be included in this research endeavor. Hence, the scope of this thesis was restricted to the questions of whether or not the DLP is in fact meeting the needs of its students, and how well, if at all, the program was responding to rapid technological advances.

The researcher identified many noteworthy qualities of the DLP. The program was housed in a recognized educational institution, and was a community-based program, accountable to a steering committee whose membership was comprised of representatives from the Deaf community, the Society for Manitobans with Disabilities, the Department of Education and Training, Literacy Branch, and DLP students. The program offered a combination of classes and one to one tutoring with a student-centred curriculum. The program was designed to teach English by utilizing the indigenous language of the students, ASL, as the language of instruction and communication. The DLP promoted ASL fluency, and it was a pre-requisite for enrollment, as set out by the DLP Steering Committee. It was evident in the data collected that the students benefitted from using ASL in this opportunity to acquire a second language, and that this minimized traditional barriers to learning. English was presented to the students in a culturally sensitive manner, that is, visually not auditorially, by means of an overhead projector or a white

board. The classes consisted of groups of people with a wide variety of English skills, which was an asset to group discussions, but made it more difficult to teach the group specific English language concepts given the disparity of previous knowledge.

Based on the data collected, it is evident that the Deaf students had a very clear understanding of what their literacy needs were, and whether or not the DLP was meeting them. In response to the research question of Needs, the students very clearly articulated that their goal was to improve their written English skills, with an emphasis on grammar and syntax, so as to communicate more effectively with hearing people in their home and work environments. The students believed that, by using ASL, this could be accomplished in classroom and tutoring environments.

Upon analysis of the data, the research question of Congruency resulted in an immediate response that, yes, the DLP was meeting the primary needs of its students. The students, though not fully fluent in written English, were, nevertheless, developing their reading and writing abilities, and noticed increased confidence, and competence, in their ability to use English after having been involved with the DLP. ASL was the language of instruction and communication in both the DLP classroom and during tutoring sessions, which match the expressed wishes of the students. The program was offered during the Fall, Winter, and Spring academic sessions by instructors who were fluent in ASL, in a location that was acceptable and convenient to the majority of the students, during the evening hours. All of which were identified as needs by the students. The one thing that was noticeably lacking, to the students, was a computer literacy component. This issue was the focus of the last research area. Also some of participants preferred a female instructor in the program.

The research question of Technology proved to reveal the program's greatest areas of weakness. The DLP had outdated computers that were not deemed to be an asset by the students, despite their desire to become more computer literate. Without computer knowledge and the most modern technology, many of the students had no plausible means of keeping up to the rapidly changing technology that permeates society. The students saw the use of Email and the internet as an additional opportunity to be exposed to a broader variety of English language models. The students saw computers as a tool which could narrow the gap between their English abilities and those of hearing people, but the program failed to address these concerns in any real way.

In conclusion, this research thesis, by means of interviewing a purposeful cross-section of the student body, was able to ascertain that, in a realistic yet imperfect way, the Deaf Literacy Program was able to meet the principle needs of its Deaf ESL learners: to improve English literacy and become more confident in their abilities to communicate effectively with hearing people in both the home and work environments. In contrast, the DLP had yet to address the issue of technology in any meaningful fashion.

Implications

Given that the situation of Deaf people is similar across Canada in that they struggle to improve English literacy skills so as to be better able to communicate with hearing people, the findings of this study are important to the national Deaf community. All Deaf Canadians recognize that economic and vocational success depends a great deal upon English literacy skills; it is the key to attaining better educational and employment opportunities. With increased literacy, Deaf people would be better equipped to deal with the advancements in technology that would further enhance their ability to compete in the labour market. Just as the DLP has sought guidance from

the pages of *“Unlocking the Curriculum: Principles for Achieving Access in Deaf Education”* (Johnson, Liddell, & Erting, 1989), so too, these can be valuable guiding principles in literacy programs for Deaf people of all ages in Canada. Hopefully, the virtues of the DLP can be replicated by other Deaf communities in Canada, in particular, provinces like Saskatchewan, that are still without any form of accessible literacy for Deaf adults. It is hoped that even the shortcomings of the DLP will be of benefit to others who wish to gather information from this study. The CAD's main goal is to reduce the illiteracy rate for Deaf adults across Canada.

Without question, the DLP has been an important program to Deaf Manitobans in that it was the first program to be offered to Deaf adults that provided English literacy training with instruction in their own language. The ability to offer student-centred learning, taught by fluent and knowledgeable instructors who were accountable to a community-based steering committee, was innovative and is a model for other literacy programs. The DLP has adopted the cultural literacy model that celebrates Deaf people as a cultural and linguistic minority within a majority society. The incorporation of this Bilingual and Bicultural philosophy has proven to be a foundation of the program. Though the DLP was successful in improving the written English abilities of its students, the reality is that they may still not be fluent, and may require more than attending class for three hours per week in order to improve their ESL abilities. The students stressed that the DLP computers needed to be updated in order to maximize their potential learning opportunities, especially with regard to the internet and Email.

Recommendations by the Researcher

As a result of this study, the following recommendations are proposed as being beneficial to the DLP and other adult literacy programs for Deaf people.

Recommendation 1. Deaf individuals should have a risk-free and unrestricted educational environment using a visual and natural communication system, that is ASL.

Recommendation 2. Literacy programs must continue to move away from philosophies that view Deaf people as *deficient* and move toward a philosophy that views Deaf people as *different*, and celebrates their abilities and experiences.

Recommendation 3. DLP students have a desire to know more about English grammar and syntax, yet are not fully knowledgeable of the linguistics of ASL; therefore, it is recommended that Deaf literacy students be more exposed to these concepts and how they relate to their own language.

Recommendation 4. Literacy programs should place an increased degree of emphasis on teaching language that is applicable to employment settings.

Recommendation 5. Instructors should seek formal and informal feedback from students on a regular basis as a method of modifying the program and ensuring that it is fulfilling its purpose. Formal feedback could be sought each term, and informal feedback could occur during the final five minutes of each class. As a means of being able to respond to the direction received from the students, the program must allocate more time for classroom preparation so that instructors can enhance their teaching strategies. The program must diligently increase its ASL and ESL resource materials. It must remain sensitive to the fact that the DLP students are ongoing ESL learners, learning at their own pace and with their own learning objectives.

Recommendation 6. Given the rapid advancements in technology, and its potential impact on the literacy abilities of Deaf people, the addition of a computer literacy component to the program should be researched and incorporated.

Recommendation 7. The concept of a Deaf family literacy program should be explored.

Recommendation 8. The feasibility of having a female instructor in the DLP should be assessed.

Recommendation 9. The program was monitored by a DLP Steering Committee that followed a collective, consensus model. This is deemed to be an asset to the program with regard to its role in policy development and program support, and should be continued.

Recommendations for Further Research

As a result of this study, it is evident that much more research needs to be done in the area of technology, with specific focus on its applicability to literacy for Deaf people.

Research Possibility 1. The internet is rapidly expanding, and it is certain to contain new web pages that will be linked to Deaf related resources. There is need of a detailed exploration of the internet, the WWW in particular, with a focus on its potential as a resource to Deaf instructors in literacy programs world-wide. New approaches to developing literacy skills, aided by advancements in technology, may prove to be instrumental to the Deaf community.

Research Possibility 2. Innovative new technology is being developed that may be more suitable to Deaf people. Interactive video communication technology is a system which will allow Deaf communicators to view and sign to each other on separate monitors, in much the same way that hearing people use a telephone or intercom to communicate. This will enable Deaf people to use ASL when communicating. The implications that this technology could have on the English literacy of isolated Deaf people and those in centres where there are no culturally and linguistically appropriate programs, are limitless, and there is much to learn about its applicability in order to be on the cutting edge of technology rather than merely struggling to keep up to it.

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APPENDIX A

DLP Survey/Interview Questions

1. Are you culturally Deaf, deaf or Hard of Hearing ?
2. What is your present educational level ?
3. What is your gender ?
4. How long have you been DLP student?
5. When did you start to participate in the DLP?
6. Tell us about involvement in the Deaf organizations and the W.C.C.D. ?
7. What are your personal and employment goals ?
8. Why do you want to be in the DLP ?
9. How do you learn your ESL through group situation and one to one tutoring ?
10. How can the DLP improve your ESL for your home and work environment ?
11. What reading and writing task(s) would you find difficult in the DLP ?
12. Do you agree that DLP maintains the ASL used in the classroom as the instruction and communication?
13. Do you satisfy your needs for the DLP ?
14. How well does the DLP met your needs?
15. If you became DLP instructor, What are your major changes for the DLP ?
16. Do you prefer day or evening for the DLP classes and one to one tutoring ?
17. Do you prefer Fall, Winter, Spring and Summer sessions for the DLP ?

APPENDIX A (continued)

18. Which location do you feel suitable for your learning environment?(RRCC or DCM/other?)
19. Do you have access to a computer at home or work?
20. Do you consider yourself computer literate ?
21. Are you aware of Deaf gopher and World Wide Web (e-mail) ?
22. Do you use E-mail ?
23. How often do you use it ? (daily,weekly,monthly?)
24. Do you think that E-mail will be a good tool for your writing skills ?

October 30, 1995

DLP Steering Committee
Red River Community College
D106-2055 Notre Dame Avenue
Winnipeg, Manitoba
R3M 0J9

Dear DLP Steering Committee:

I am a Masters student in the faculty of Education at University of Manitoba doing my master's thesis. I am asking you for a letter of permission to conduct a study to see if the goals of the current students in the Deaf Literacy Program at Red River Community College were met by attending the DLP, how well the learning environment and instruction of the DLP matched the needs of current students, and how well the available technologies match the needs of current students at the DLP.

I would like to conduct one to two hour face to face interviews with 5 to 8 current DLP students or participants. These interviews will be videotaped. They will be translated from the ASL videotapes to written English and their comments will be strictly confidential as anonymity is to be maintained in my notes, written translations and any publications. These concerns from the subjects (participants) will be guaranteed and protected when we release the data with the DLP Steering Committee and the researcher will advise the DLP Steering Committee to honour the subjects' concerns as an anonymity and confidentially. I will clarify about my roles of being researcher and instructor/ coordinator in the Deaf Literacy Program and my master thesis as a process. I will be advising you that videotapes will be erased upon the completion of the study.

Thank you for your consideration and please feel free to contact me at 632-2144 (tty) and Dr. Denis Hlynka at 474-9062 (voice) if you have any questions regarding a letter of permission from the DLP Steering Committee.

Sincerely Yours;



John Gibson
Graduate Student

January 29, 1996

Dear DLP students:

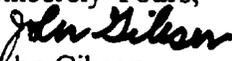
I am a Masters student in the faculty of Education at University of Manitoba and am doing my research which is required for my M.Ed. Thesis wish to determine if the goals of current students in the Deaf Literacy Program(DLP) at Red River Community College (RRCC) were met by attending the DLP, how well the learning environment and instruction of the DLP matched the needs of current students, and how well the available technologies(e-mail, computers and software programs) match the needs of current students at the DLP..

I would like to conduct one to two hour face to face interviews with you. These interviews will be videotaped and they will be translated from ASL videotapes to written English. I will ask you to review these translations to ensure the accuracy of your comments. Your anonymity will be maintained in my notes, written translations and any publications, as I will assign pseudonyms. The videotapes will be stored in a secure place, and they will be erased after the publications.

If you choose to participate in this study, you may refuse to answer any questions or withdraw from the study completely at any time without penalty. Participants in the study will not affect your standing in the DLP. As I am a staff person at the DLP, you may feel uncomfortable raising certain issues with me regarding the DLP. You may contact the DLP Steering Committee to share any of these concerns. This information will be shared with me (i.e., the nature of the concern), but I will not be told who made these comments. I want you to feel comfortable in sharing all of your views while protecting your identify.

When I finish my study, I will make a summary report of my findings available to you in both ASL videotape and written English report. Please do not hesitate to contact me at 632-2144 tty or my thesis advisor, Dr. Denis Hlynka at 474-9062 (voice) if you have any questions.

Sincerely Yours;


John Gibson
Graduate Student

Dr. Denis Hlynka
Thesis Advisor

I, _____ agree to participate in the study, " A Review of the Deaf Literacy Program at Red River Community College." These interviews will be videotaped.

Participant



John Gibson
Graduate Student

Date: February 22, 1996