



Literacy and Health in Canada:

What We Have Learned and What Can Help in the Future?

A Research Report

Clear Language Edition

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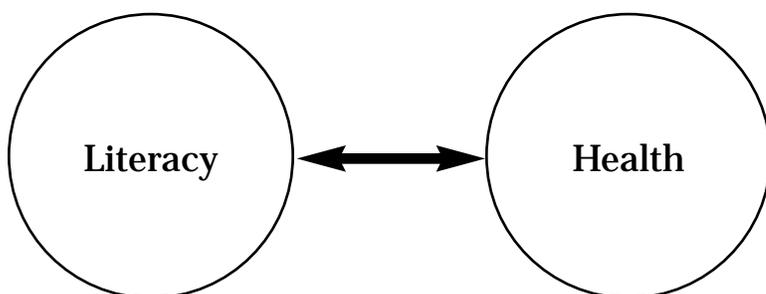
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Introduction

Health and Literacy are linked.

We have learned that people with reading problems have more health problems.

We need to learn how to make it easier for people who don't read well to be healthy.



Why was This Research Report Done?

This research report was done for an international conference. The conference was about how to improve the health of people who are most at risk for health problems. The people who planned the conference wanted to know about health and literacy research in Canada.

How was This Research Report Done?

This report was written by Barbara Ronson and Irving Rootman

They first read many reports and studied literacy and health projects which were done in the past.

- When they were finished the research they made recommendations for work and research study to be done in the future.
- This report will help us learn more about literacy and health today.

What Have We Learned?

The study of literacy and health in Canada began about 15 years ago. The Ontario Public Health Association (OPHA) and Frontier College worked together on a project to learn how reading and health were connected.

Together they produced two reports:

1. The first report “ *Making the World Healthier and Safer for People Who Can’t Read*” was printed in 1989. They learned:
 - Health Information is hard to read. People who don’t read well have trouble getting information they need to learn about their health.
 - People who don’t read well have difficulty with written instructions from their doctors and nurses. They also have problems with complicated instructions. This can affect how they cope with an illness.
 - Many people can’t read the directions on medicine bottles. This can result in mistakes such as taking the wrong medicine or too much medicine.
 - Many people are hurt at work. This is often because they cannot read warning signs and safety information.
2. The second report, “*Partners in Practice,*” gave examples of how literacy workers and health workers and learners worked together to improve health information for people who did not read well.

In 1994, the Canadian Public Health Association (CPHA) began the National Literacy and Health Program (NLHP). The NLHP helps to make people more aware of literacy and works to improve the health of people with reading problems.

The CPHA was joined by 26 Canadian organizations who were interested in literacy and health. They worked together to study and to hold conferences on literacy and health. They also print and make plain language health materials available to everyone.

This work has made Canada a world leader in literacy and health.

What are the New Literacy and Health Needs in Canada?

Today, literacy and health needs are changing.

The government of Canada must know where the money for literacy and health will do the most good.

There are new trends which are linked to literacy and health. These trends are:

- **More jobs need higher literacy skills.** Workers need better reading skills for their changing jobs and for new jobs.
- **The use of computers is growing.** Many people use computers for work and to learn about their health. People who don't read well often find it difficult to use computers.
- **Immigration.** Newcomers to Canada have special needs because of culture and language. The ability to read, write, speak and listen in English or French is important to get information about health and to know where to go to get help.
- **The Canadian population is aging.** There are more older people now and there will be even more in the future. Older people are more likely to have reading difficulties. Older people take more medications and need more health information.
- **Home health care.** We have more people being cared for in the home instead of in hospitals. We need to have good clear information to provide health care for people at home.

What Has Happened in Canada in the Past?

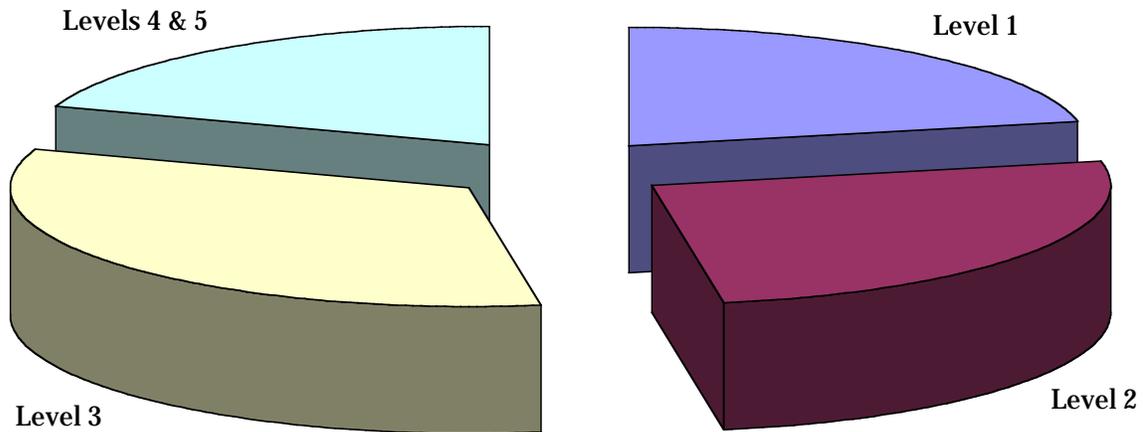
In 1986, the Canadian government decided that literacy was important and made literacy a priority.

Southam Inc., a newspaper company, had reporter Peter Calamai investigate literacy in Canada. The Southam report was published in 1987.

- The Southam survey showed that about one quarter of Canadians needed help to read, write and use numbers. They needed this help to get by in everyday life.
- The Southam survey also showed more education was needed to get a good job. In the past, a grade nine education was enough to get a good job.
- Canadians were shocked because they did not think literacy was a Canadian problem.

There were two more surveys done in 1989 and 1994. The following diagram shows the literacy levels of Canadian adults in the latest survey.

**Reading Level of Canadian Adults over 16
(International Adult Literacy Survey, 1994)**



Level 1 – A person is not able to read at all or has very serious problems with reading (22%).

Level 2 – A person can read simple language (26%).

Level 3 – A person can read well enough to get along from day to day (33%).

Level 4 & 5 – People can read complex reading material (20%).

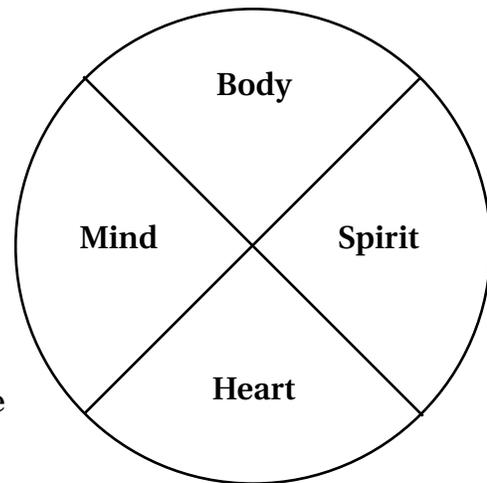
These surveys confirmed that large numbers of Canadians had great difficulties reading.

Many people worked to improve literacy. Peter Gzowski, a famous CBC reporter, and people in government and business put a lot of time and money into improving literacy. After a number of years, there were some improvements but not nearly as much as expected. What we did learn was that literacy and health were connected no matter how you looked at it.

What is the Meaning of Health, Health Promotion, Literacy and Health Literacy?

What is Health?

Health is not just a healthy body. The sacred Medicine Wheel of the Aboriginal peoples shows 4 parts: mind, body, heart and spirit.



This is called holistic health. Holistic health means the whole person is healthy.

The World Health Organization and others now describe health as holistic.

Literacy is clearly linked to holistic health:

- When children and adults are not well they cannot think as clearly or learn as fast.
- When people are hungry or do not feel safe it is hard to concentrate.
- When people are lonely or hurt they need to have help before they can learn.

What is Health Promotion?

Health promotion is defined as people having more control over their health. To be healthy people need equal chances to have nutritious food, safe housing and good health care and education. To be healthy we also need safe jobs and enough money to live on. We must also have support from other people so people are not alone and without help when they need it. These things are sometimes called determinants of health.

Public health leaders from many countries are now paying attention to health promotion.

They have agreed that it is important for communities to be healthy.

In a healthy community people come together to help each other in good times and bad times.

Ottawa Health Promotion Charter

In 1986 public health care leaders from around the world met in Ottawa to discuss common concerns. A document was written at this meeting that outlined what they thought was the best way to understand health and improve public health. This document has become known as the *Ottawa Charter for Health Promotion*. The public health leaders at the conference agreed on five Action Areas that can improve community health:

1. **Building Healthy Public Policy:** We need to make sure new laws improve people's health.
2. **Creating Supportive Environments:** We need to create communities where people support each other and take care of the natural environment.
3. **Strengthen Community Action:** We need to help people in communities work together in ways that they agree can make a difference for the health of their people.
4. **Developing Personal Skills:** We need to help people learn skills in healthy lifestyle practices such as exercise, personal hygiene, and safe sex.
5. **Reorienting Health Services:** We need to change health care systems so that fewer people get sick or injured, and more people recover faster and stay healthier.

Leaders have used these approaches to improve health in their own countries since then. Health leaders from around the world continue to meet at international conferences to share what they know and have learned about *health promotion*.

What is Literacy and How do we Measure Literacy?

The definition of literacy has changed. Today we need more literacy skills to do ordinary things such as: to drive a car, to vote in an election, and to learn new skills on the job. People also learn from TV and radio. They do not have to read to get new information.

Other kinds of literacy such as media literacy, computer literacy and oral literacy are very important today.

Literacy is also linked to control over one's life. This is sometimes called empowerment.

Empowerment is a word used in Aboriginal books on literacy and learning. The Ontario Native Coalition defines Native literacy as a tool which empowers the spirit of Native people.

There are many definitions of literacy. The official international definition is:

“The ability to understand and employ (use) printed information in daily activities – at home, at work and in the community – to achieve one's goals and develop one's knowledge and potential (to be the best one can be).”

There are different ways of measuring literacy.

Kinds of Literacy Measured in the International Adult Literacy Survey

Prose literacy: Reading and understanding text in sentences and paragraphs.

Document literacy: Using and understanding maps, charts, forms and other documents.

Quantitative literacy (or Numeracy): Using numbers for daily tasks such as balancing a check book, calculating a tip, completing an order form, or determining the interest on a loan.

In 1994, Canada helped to develop a new measurement of literacy. It is called The International Adult Literacy Survey (IALS). This survey is used around the world. This survey found that about half of Canadians are in the lowest two levels of this test. ([See chart on page 6](#)).

What is Health Literacy and How do we Measure Health Literacy?

Like the definition of literacy, the definition of health literacy is also changing.

The first definition was about how to read medicine bottles and appointment slips.

A new definition of health literacy used by the World Health Organization (WHO) says:

- A person must be able to get health information.**
- A person must be able to understand the information.**
- A person must use it to improve their health or the health of their families or communities.**
- A person does not always have to read or write to get health information and use it.**

Measurement of health literacy has also changed over time.

- The Rapid Estimate of Adult Literacy in Medicine (REALM) and the Test of Functional Health Literacy in Adults (TOFHLA) are the main tests of health literacy.**
- Tests have shown many people do not understand information given by their doctors.**

We have come a long way in describing, understanding and measuring literacy and health literacy. However, most tests only test reading and writing skills and are in English only.

There are no health literacy tests for listening and speaking skills which are also important for people to get health information and instructions.

We need to continue to work on finding better definitions and measures for literacy and health literacy.

What is the Up to Date Research ?

What do we know about the Direct Effects of Literacy on Health?

We know that people who do not read well:

- Have difficulty finding and understanding health information
- Have more health problems
- Make more mistakes with medications
- Have more workplace accidents

If people do not understand doctors' instructions and are not able to learn more about their health they can be harmed. Doctors and other health workers must be certain their patients get information and understand what is important for their health.

Employers must also understand the importance of people knowing workplace safety rules. For example, the Workplace Hazardous Materials Information System (WHIMIS) is written at a college level. If a person does not have safety information because they cannot read well, they are more likely to be injured.

What do We Know About the Indirect Effects of Literacy on Health?

Research shows that people with lower literacy skills are more likely:

- To have lower paying jobs and be unemployed
- To feel more stress and be more vulnerable when things go wrong
- To have unhealthy habits such as smoking and not getting enough exercise
- To have more visits to the hospital and to stay in the hospital longer
- To have more difficulties in using the health care system

There are links between literacy and health care costs. We need to know more about costs.

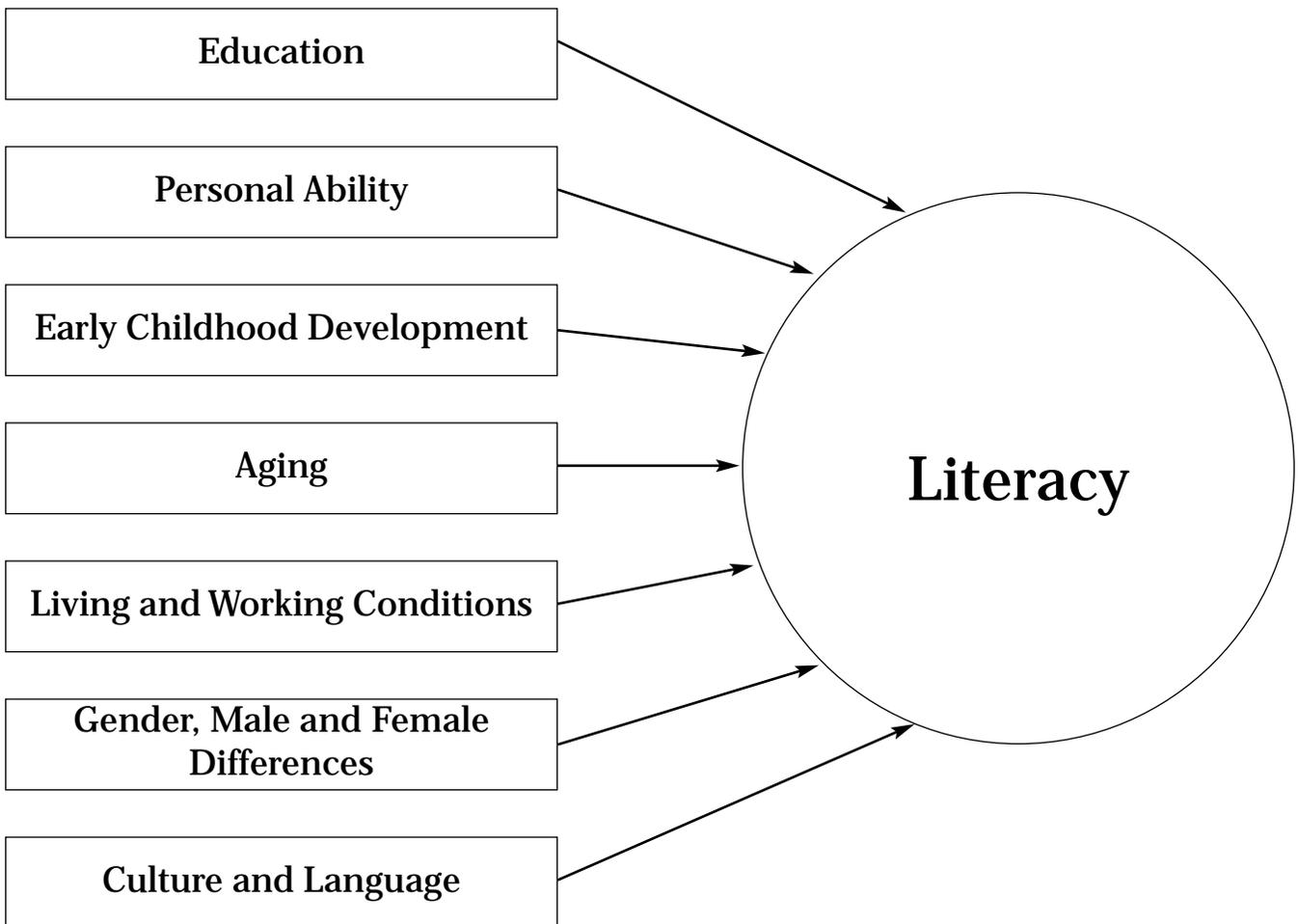
We also need to know how literacy affects how well we live. How well we generally live is sometimes called quality of life.

What do we know about Literacy, Health Literacy and Other Literacies?

There has not been a lot of research about the different kinds of literacies, such as computer literacy and media literacy, and how they affect health. We need to know more.

What Affects Literacy?

A person's literacy level is affected by other conditions in his or her life. These conditions are sometimes called "determinants." The determinants of health which are linked to literacy include:



Education

We need to learn more about what works well in school. There are differences between schools and the literacy levels of their students. Not everyone who completes school is able to read well.

There are programs and approaches which improve school performance. Children who have meals at school such as breakfast programs do well in their studies. They also attend school regularly and stay in school longer.

The health of students, teachers and others who work in schools have been related to student success with learning.

Personal Ability

Several things which are related to a person's ability to learn need to be looked at. This is especially important in childhood. Some conditions which affect learning are:

- Learning disabilities
- Giftedness
- Attention deficit disorder (ADD)
- Sight and hearing problems
- Genetic conditions such as Downs Syndrome

It is important to find out who needs special attention and to start programs early.

Early Childhood Development

Research has shown that early learning affects us for our whole lifetime. Early learning affects:

- Our use of language
- Our emotions
- Our attitudes
- Our abilities to solve problems

There are times when it is easier to learn. The most important time for children to learn language is from birth until they are three years old. It becomes more difficult to learn a second language after age 10. Early learning can help break the cycle of low literacy which sometimes goes from one generation to another.

Aging

Many older people have difficulty with reading and we know from research that:

- Literacy levels change with age. Most older people did not go to school as long as children today do. Their jobs did not require as many reading skills. Also people who don't read a lot can lose reading skills over time.
- This can be dangerous because older people tend to need more health care.
- If an older person cannot read, see or hear well they may not get important information about their health. Lack of health information and misunderstanding of instructions can make a big difference to the health of an older person.
- Older people who have lower literacy levels have more hospitalizations and stay in hospital longer than those older people without reading problems.
- Studies have also shown that older people who don't read well are more likely to have more mental health problems.

Living and Working Conditions

Up to one half of adults with lower levels of literacy live in low income housing. Children of parents with reading problems are more likely to have reading problems themselves. In 2000, an international study showed that children who had parents who encouraged their learning did better as students.

Violence and bullying can also make it difficult for both adults and children to learn.

- Women in literacy programs have identified violence or threats by men as the most serious blocks to their learning.
- Violence and abuse are the key reasons many children leave school early and leave home.

Safe workplaces can help learners. Since 1980, a growing number of workplaces have literacy learning programs. For example, the BEST program is run by the Ontario Federation of Labour and its member unions. There are about 75 courses in different workplaces in Ontario. These workplaces include hospitals, hotels, and factories.

Gender: Differences between Men and Women.

There are differences in literacy opportunities and abilities between men and women.

- In less developed countries, women tend not to have the same chances as men to learn to read. In 1999, a study showed that about 10% more women than men who immigrated to Canada had extreme difficulty with reading.
- World wide surveys show girls score better than boys.
- In Canada, there are differences between the literacy abilities of boys and girls. In Ontario, girls score better than boys in grades 3, 6 and 10.
- In Canada, the differences in literacy skills between boys and girls become equal when they become adults.

There are questions about literacy opportunities and abilities for males and females which need further study.

Culture and Language

Some groups of people in Canada have lower literacy scores. These are:

- Francophones (However, literacy levels appear to be improving with the younger generation)
- Aboriginal peoples
- Immigrants

Recent research has found a link between a feeling of belonging and learning. Students who feel connected to their schools do better in school. According to Traditional teacher Jim Dumont, Aboriginal peoples want to know their history, customs and spirituality. This desire to learn becomes the foundation of the literacy program.

What Can Help in the Future?

In order to improve health literacy, it is important to know what works well and to build on that. Some areas which have been studied show promising steps for the future. These areas include health communication, education and training, community development, organizational development, and policy development. Each one of these areas needs more study and evaluation to see if they really work, why they work, and to measure how well they work.

Health Communication.

People who study health and literacy have paid a lot of attention to the way health information is communicated. There have been some studies of approaches used to improve understanding of health messages. The following approaches have been studied:

- Use of plain language and clear communications
- Use of pictures
- Use of videotapes

There have not been enough studies of different approaches to communicating health messages and very few comparisons.

We need to learn more about new technologies and how computers can be used.

Many studies found that there is a bad match between the literacy level of the information and those who are expected to read the messages. For example, researchers in Montreal found the pamphlets in doctors' offices were written for people who were able to read at almost a grade 12 level. Most patients had a much lower reading level.

Consent forms may be a problem for many patients. People have to know who they are giving their permission to and what they are giving permission for. An example of this is permission for a doctor to operate on a person. People have a right to know what they are consenting to. This is a person's legal right. We need to study and improve consent forms.

Health Education and Training

We need more classes and other ways for people to learn about health. The most promising studies show that combinations of approaches work well. For example, when a video and a booklet were used to teach about prevention of breast cancer, people were more likely to have a mammogram 6 months later.

There are several good examples of programs where students choose the topic and choose how they want to learn. One of these programs was developed by the Canadian Public Health Association in Nova Scotia.

Researcher Dr. Rima Rudd has studied health projects in adult learning centres. The health topics were chosen by students. The most common topics were: nutrition, HIV/AIDS, substance abuse, cancer prevention, stress management, the health care system and parenting skills.

Health topics interested the students and they worked hard on their projects. The result was that their reading and writing and their presentation skills improved. We need to have more study of these programs where students participate. We also need to learn more about motivation and what encourages people to learn.

Community Development

There is more interest in communities where people work together to improve health. The literacy and community development work of Paulo Freire of Brazil is well-known and provides an example many literacy teachers follow.

Freire believed that education helps people to learn about oppression and the forces which keep them down. When people understood this they were better able to change things and have more control over their lives. Learners and teachers at a program in Guelph Ontario used the approach of Freire. They worked together to produce a video on goal setting. They understood the importance of the need to act on wider community concerns.

Health and literacy expert Marcia Hohn worked with students who did so well that their project became a model for “Student Action Teams” across the State of Maine. There are resources such as books for people interested in a grass roots approach to working with

people in the community. These can be helpful to people working to improve health and literacy. They need to be studied and evaluated.

Organizational Development

Change often starts at the top in organizations such as workplaces. Information about how organizational change is affecting absenteeism and the emotional well-being of people is starting to come out. We are also learning how health promotion in the workplace is a good investment for employers. Where we work and how we work have a big effect on our health. For example, we need to be safe, to be proud of our work, to be appreciated and to get a decent wage. We need to learn more about how organizational change affects health and literacy.

Policy Development

People who make decisions in organizations agree on rules and goals. This is called policy. The people who make policy decisions in government decide how our tax money gets spent. If they decide literacy and health is important they will give more money to help in these areas and there will be more programs and research. For example in the U.S. some states give tobacco tax money directly to adult learning centres.

A workplace can also have a policy. Some organizations have plain language policies. This means everything to be read by the workers and public has to be written in plain language.

Employers should make certain workers understand safety information. Some companies have been successfully sued because safety information and warnings were difficult to read. If the information had been easier to understand, injuries might have prevented.

Marcia Hohn has studied literacy and health policy and programs in the U.S. She says we need policy to provide:

1. Money we can count on
2. Teacher training to include health education in classes
3. A system to have people referred for health care if someone needs attention
4. A place for teachers and health workers to share information and get help

Policy decisions can be part of setting a goal. Health literacy is a goal in the *Healthy People 2010 USA Blueprint*. This document is for state and national planning. The decision makers decided health literacy was important and decisions will be made in the future to improve health literacy.

What More do We Need to Know?

We need to know more about the approaches to improving literacy and health literacy described above. We also must learn more about the costs of low literacy, the needs of Aboriginal peoples, Francophones and Immigrants, and Lifelong Learning.

Costs of Low Literacy

There has been some study of the costs of low literacy to the health care system but more research is needed.

Businesses have studied the costs of low literacy mainly in the workplace. The estimate is that low literacy costs about 4 billion dollars a year in Canada. This is because of the need for training, job turnover, mistakes made, injuries and time missed from work. We also need to learn more about what politicians and other decision makers understand about literacy and health.

Needs of Aboriginal Peoples, Francophones and Immigrants.

We need more study of the literacy needs of Aboriginal peoples, Francophones and immigrants. We need to know how many people are affected. We need to learn about how the literacy needs of these people are linked to health literacy

Aboriginal Peoples

There is a need to understand and respect the relationship between literacy and culture in the Aboriginal communities.

- Aboriginal peoples value language and control of education. They see literacy programs as a way to become empowered and self governing.
- Aboriginal peoples see health and healing as holistic. Literacy programs are integrated into all community work including healing.

In 1966 a study showed that, compared to all Canadians, twice as many Aboriginal people left school before they finished grade 9.

There needs to be more study of the Aboriginal Adult Literacy programs. These programs are often attended by people of all ages.

Francophones

Canadians who speak French value their language.

- Francophones, like Aboriginal peoples, see language as important to keep their culture. Many believe it is important to learn their mother tongue first. This is difficult in provinces other than Quebec. There are also not enough French literacy programs. The result is that compared to all Canadians there are more Francophones who have a lower level of literacy.
- Francophones also see language as important to empowerment.

Immigrants and New Canadians

People who immigrate to Canada often have lower literacy levels. The newcomers who read and write well in their mother tongues often need lessons in English or French to get jobs.

Literacy programs are funded by different levels of government. Some money comes from different departments in the Canadian government. Other money comes from the provincial or city governments.

All these levels of government have different rules about who can attend the classes.

Literacy teachers in the community sometimes hide the fact they have immigrants in their classes. Governments need to look at how their policies and programs can be improved to meet the literacy needs of all Canadians.

Literacy, Lifelong Learning and Health

Canadians must have chances to learn throughout their lives. This is called lifelong learning.

- The education system should allow people to drop in and drop out as they are ready to learn. People need and want more information at different times in their lives. People with reading difficulties should not be embarrassed. Learning centres should be comfortable and welcoming to everyone.
- Lifelong learning would make it easier for people who do not read well to return to school. Lifelong learning is empowering.

Recommendations for the Future

Canadians have been leaders in literacy and health work. We are a country that can continue to lead. We need to do more research. Research will save us money and point the way to improve the literacy and health of Canadians and others.

- We must learn where money for literacy will do the most good.
- The different departments who give money for health and literacy research need to work together.
- CPHA and members of NLHP need to form partnerships with researchers and learners to study literacy and health projects and programs.
- Community agencies and literacy and health workers should work together with researchers and learners to do evaluation.

All Canadians need to read, write and use numbers well enough to meet the demands of daily life. We need to continue to do research and work to help Canadians improve their literacy and health as well as their health literacy.