Twelve Years of

French-Language Adult Literacy

Research in Canada: 1994-2005

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Ce rapport est disponible en français sous le titre *Douze ans de recherche en alphabétisation des adultes en français au Canada : 1994-2005*.

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Notes on the publication:

Almost all of the references in the text are from the RÉCRAF database (http://alpha.cdeacf.ca/recraf) and are listed in an appendix. However, reference is sometimes made to other documentary sources. In that case, the authors' name is followed by an asterisk, and the full reference is provided at the end of the report under the heading "Bibliography."

RESEARCH TEAM

Claudie SOLAR has a research master's degree in mathematics from the Université McGill and a doctorate in adult education from the Université de Montréal. She is a full professor in the Psychopedagogy and Andragogy Department of the Faculté des Sciences de l'Éducation at the Université de Montréal. She has been working in the field of adult education for over thirty years, and has taken part in numerous projects in conjunction with the CDÉACF. She has several publications to her credit, including: *Pédagogie et équité* (Logiques, 1998); *Apprentissage et développement des adultes* (Logiques, 1998); *Le groupe en formation des adultes* (DeBoeck Université, 2001); *La formation continue: perspectives internationales* (L'Harmattan, 2005).

Laurence SOLAR-PELLETIER works as a consultant and has a bachelor's degree in management engineering from the École polytechnique de Montréal; she is pursuing a master's degree in international management at the HEC. Her field of research is prior learning recognition.

Mathieu SOLAR-PELLETIER works as a consultant. He has a bachelor's degree in business administration from the HEC and is pursuing project management studies. His area of expertise is project management, quantitative data processing and graphical results presentation.

Martine BOUCHER has been the coordinator of the Répertoire canadien des recherches en alphabétisation des adultes en français for the Centre de documentation sur l'éducation des adultes et la condition féminine since 2003. She has many years of experience in the fields of education and publishing. She is the co-author of the "Guide d'élaboration, de réalisation et de promotion du projet Sacs d'histoires", and the coordinator for this project to develop literacy activities for underprivileged families with children attending schools taking part in the Programme de soutien à l'école Montréalaise.

GRANT

1. INTRODUCTION

Since International Literacy Year and the Jomtien Conference on Education for All in 1990, numerous initiatives to promote literacy in all its forms have been developed. Literacy Year also enabled the Centre de documentation sur l'éducation des adultes et la condition féminine, the CDÉACF, to strengthen its foundations and become the best place to find French-language documentation on literacy education and literacy from Quebec, Canada or abroad.

In fact, the CDÉACF has been working on developing French-language literacy-related documentary resources, especially Canadian resources, since 1988. With the support of several partners, the Centre took part in the development of the *Canadian Literacy Thesaurus* (http://thesaurusalpha.org/) and in the establishment of the Répertoire canadien des recherches en alphabétisation des adultes en français, the RÉCRAF, which is nowadays known as COMPAS (http://compas.cdeacf.ca/).

The *Canadian Literacy Thesaurus* provides a bilingual list of standardized vocabulary in the field of adult literacy. Developed in consultation with the Canadian literacy community, both the terminology and structure of the Thesaurus reflect the diversity of regional literacy practices and activities across Canada. It can be used to index and organize documents, whether they are print, audiovisual or electronic documents. The Thesaurus was produced and is updated by the Canadian Literacy Thesaurus Coalition and receives support from the National Literacy Secretariat (NLS) of the Department of Human Resources Development Canada, much like the RÉCRAF and the project that made this study possible.

Created in 1999, the RÉCRAF indexes French-language adult literacy research in Canada, whether that research was done by literacy education groups, non-profit organizations, government agencies, companies, educational and research institutions, or independent researchers. New records have continually been added to the index since it went online in September 2000. In mid-June 2005, the RÉCRAF database contained information on 153 completed or pending research studies written in French and published in Canada since 1994. It is the only French-language inventory of adult literacy education and literacy research in Canada.

In 2005, the CDÉACF received a funding grant from the National Literacy Secretariat (NLS) so that it could offer the research community and literacy education workers a summary overview of the French-language adult literacy research, as illustrated by the RÉCRAF database. This report, which covers the research indexed from 1994 to mid-June 2005, sets out the results of that summary work. The purpose of this summary is to better support Canadian and other researchers in continued thought about the research-related strategies, topics, contexts and partnerships to be developed.

1.1. Summary Overview Development

The summary overview was developed in association with the RÉCRAF advisory committee, which supervised the initiative; a list of its members is provided in Appendix 1. From the start, the plan was to do the summary work using the records from the RÉCRAF database. This means that the overview is based on information included in the website's computer records, especially the information from the short and long abstracts. Going about things another way would have required further resources in terms of time, availability and budget. This way, there was no going back to the source to check, validate or round out the information. As a result, the quality of the overview depends on the quality of the abstracts. This is one of the inherent limitations of the overview process.

In order to draw up this overview, information also had to be obtained on computer media to facilitate the analysis and summary work. This is why we wanted to have the information on a ClarisWorks, File Maker Pro or even Endnote database. This could not be done in due time, and the work was eventually done by data transfer to Excel and using hard copies of the RÉCRAF records.

As for the methodology used to process the data, we also used the grant application frame of reference here, which had been designed using a process comparable to the summary overview prepared for the English-language literacy research (Campbell*, 2002). This frame of reference was discussed and amended following talks with the members of the RÉCRAF advisory committee; in particular, we incorporated into this framework the typology of the Canadian Knowledge Centres (CCL) in order to maximize the usefulness of the overview for future literacy research work. The frame of reference therefore includes nine (9) topics, starting with adults and the aspects of literacy and ending with learners and educators who work in the field of:

1. Adult literacy;
2. Accessibility and retention;
3. Literacy, numeracy and basic skills;
4. Literacy among Aboriginal peoples;
5. Literacy and employment;
6. Literacy and health;
7. Literacy and technology;
8. Family literacy;
9. Learners and educators.

The data processing entailed classifying each information record under a single topic, which is a second limitation of this overview inasmuch as research often deals with several subjects. For the purposes of the overview, the records were classified based on the main topic of the research. In order to ensure uniformity of codification, the research team proceeded as follows: a member coded half of the

records using the short abstract and the other half using the long abstract; a second team member did the opposite; the third member checked the classification when the two codings did not tally. The classification of each problem record was discussed as a team. Lastly, a final check was done when the data in each topic was processed; at this point, the internal consistency of each of them was used as guideline.

Then, data processing within each topic was done by re-categorizing the records based on their content. An inductive content analysis process then made it possible to generate sub-topics in order to better describe the topic and summarize it.

The research report was written in several stages. The project started with a conference call with the RÉCRAF advisory committee regarding the research and methodology. Once work began, a face-to-face meeting was held to discuss the format of the report and the preliminary results for four of the nine topics. An initial complete version of the report was then sent to all of the advisory committee members; finally, comments and suggestions were incorporated into this report.

1.2. Report Presentation

The summary report on literacy research has two main parts. The first, titled *Summary Overview of French-Language Literacy Research in Canada: 1994-2005*, provides an assessment of the research and a summary of the context, topics, authors, publication years and types of research, as well as the funding sources and places of production. As such, it offers a perspective, especially on the development of and trends in the research.

The second part provides a *topical overview*, which entails a topical analysis of the research. It therefore contains further details about each topic, together with its sub-topics and authors, as well as a summary that comes before the list of research studies classified under the topic.

This report ends with a conclusion, followed by a bibliography of the referenced works that are not in the RÉCRAF database. Several appendices follow, including a list of the RÉCRAF advisory committee members, a list of abbreviations, a short list of the main definitions and a full list of the research indexed in the RÉCRAF on the basis of which this overview was written.

2. SUMMARY OVERVIEW OF LITERACY RESEARCH IN CANADA: 1994-2005

Literacy education refers to the basic teaching or learning of the written code (reading, writing, arithmetic), generally in a society's mother tongue, dominant language or language of use, as well as the result of that teaching or learning (Legendre*, 2005, p. 41), whereas literacy is the ability to understand and employ printed information in daily activities, at home, at work and in the community, to achieve one's goals and to develop one's knowledge and potential (Statistics Canada*, 1996b, p. 2).

The database of the Répertoire canadien des recherches en alphabétisation en français includes research on or closely related to adult literacy education or literacy; research dealing only with children is not included. All of the indexed research is published in French in Canada, whether or not the author is Canadian, and whether or not the population studied is Canadian. It is also important to stress that literature reviews and documentary research, as well as inventories, experiment descriptions, opinion pieces, accounts or conference proceedings are not included in the RÉCRAF's descriptive records.

There is only one exception in that one document sets out conference proceedings on the topic of literacy among Aboriginal peoples. The RÉCRAF team made this decision considering that the subject was either under-covered or not covered by other French-language documents. This document was translated from English and is included in the research reports available in both languages. The latter represent a total of nearly 25% (39 documents) of the 153 research documents indexed from 1994 to mid-June 2005.

The summary overview of the French-language literacy research in Canada was produced using those records exclusively. No new records were added subsequently, although the documentary database on the RÉCRAF site is constantly changing. Only the records mentioning that processing was in progress were reviewed when the processing was completed, while the report was being finalized.

The following overview therefore provides a summary of the 153 research studies duly indexed from 1994 to mid-June 2005. It covers nearly twelve years of research and provides summary information. Some research studies may, however, have been completed within this timeframe, but they do not contribute to the overall picture because they were not indexed and included. To our knowledge, little work falls into this category, and we believe that the summary overview we will be providing is representative of French-language adult literacy research in Canada.

This part of the report covers several cross- aspects of the research. It deals

with the context, topics, authors, publication years and types of research, as well as the funding sources and places of production. All of these data come from research records in the RÉCRAF database processed on paper or in electronic format (Excel and RÉCRAF database). This summary overview ends with a conclusion that goes over the broad outline revealed by processing the various aspects and suggests development prospects.

2.1   Context of the Research Studies

The database used to produce the overview includes 153 references to French-language research studies on literacy education and literacy in Canada. Literacy education covers multiple realities and the *Dictionnaire actuel de l'éducation* (Legendre, 2005) offers over nine pages defining the word. In that text, **literacy education** refers to the *acquisition of basic knowledge and skills everyone needs in a rapidly changing world* (Confintea 1997, cited by Legendre, 2005, p. 41).

UNESCO proclaimed 1990 International Literacy Year, which prompted many governments, including the federal, provincial and regional governments of Canada, to initiate action and research in this field.

Although grassroots community literacy education groups have been working on this issue and with adults with little or no literacy skills for several decades, the significance of this literacy year should be stressed. Although research studies were done in community and educational settings before that decade, 1990 brought visibility to that work, if only through the establishment of the NLS and the consolidation of the CDÉACF's activities.

It was this international year that prompted eight industrialized countries — Canada, Ireland, Germany, the Netherlands, Poland, Sweden, Switzerland and the United States — to decide by mutual agreement to conduct an International Adult Literacy Survey (IALS) in 1994. This was the first multi-country and multi-language assessment of adult reading skills.

"The survey's goals were to develop scales for comparisons of literacy performance among people with a wide range of abilities, and to compare literacy across cultures and languages (Statistics Canada*, 1996b, p.1)."

"The survey was sponsored by the National Literacy Secretariat and the Applied Research Branch of Human Resources Development Canada and was managed by Statistics Canada in cooperation with the OECD, Eurostat, and UNESCO. Key support was given by the U.S. Educational Testing Service, the U.S. National Center for Education Statistics, and survey and educational researchers in all the participating countries. The international results of the IALS were published in December 1995 (Statistics Canada, 1996, p.1)."

Each participating country published its own data, and the Canadian results were released in 1995 (Statistics Canada, 1995). It goes without saying that this work is a large part of the database due not only to the unpublished data to which it provides access, but also due to the changes that the methodology used are causing to the definition of literacy and to adult literacy assessment methods.

Statistics Canada was responsible for designing and managing the IALS, thereby taking advantage of Canadian skills in this area, thanks in particular to various research studies completed over several decades by governments, educational and research institutions, and in community settings, the latter having original and supported field practices. The work is based, among other things, on the results of the Canadian Survey of Literacy Skills Used in Daily Activities (LSUDA), which was conducted in 1989.

Considering the scale of the IALS and the quality of the methodology and results, it is no surprise that the survey sheds special light on the RÉCRAF database: 31 records refer to it in some way; that is nearly 20% of the research studies. The years of the summary overview we are preparing actually cover the period from 1994 to mid-June 2005; these were the very years the IALS results were released. Many of the works are actually IALS results with the government of Canada by way of Statistics Canada as the publisher. Other research studies rely on the results of the survey in order to better define the data to be gathered.

Although the statistical data influence the research work indexed in the RÉCRAF database, the definitions and methods for assessing adult literacy levels are just as important, since they are generally included in the conceptualization of the research studies. Thus, a certain unanimity on the definition of literacy and on adult skills assessment methods emerges from the database and indexed research.

Literacy is defined as:

"the ability to understand and employ printed information in daily activities, at home, at work and in the community, to achieve one's goals and to develop one's knowledge and potential (Statistics Canada*, 1996b, p. 2)."

Three categories of literacy were considered in order to reflect the complexity of literacy in industrialized societies, and a scale was defined in order to distinguish five skill levels. Box 1 below sets out more specific information about the literacy categories and levels; it will provide a better understanding of the research results on the topical analysis that follows the summary overview.

The different work done as part of the IALS produced interesting results and generated keen interest. Many other countries later conducted the same or a similar survey on their communities (Australia, Chile, China, Flemish Community of Belgium, Denmark, Finland, Great Britain, Northern Ireland, Japan, Malaysia, New Zealand, Portugal, Province of Ontario, Czech Republic, Slovenia, Switzerland, Vanuatu). The

various international cooperation work and meetings resulted in the adoption of seven skill areas:

1. Narrative text comprehension;
2. Schematic text comprehension;
3. Numeracy;
4. Problem-solving;
5. Teamwork;
6. Productive thinking;
7. The knowledge and use of information (Murray, Clermont and Binkley, 2005, p. 14-15).

Box 1 – Categories of Literacy and Reading Skill Levels

The literacy level is assessed according to the level of comprehension of various texts:

1. **The comprehension of narrative texts**, or the ability to understand and use the information in various texts, such as editorials, news, poems and works of fiction.

2. **The comprehension of schematic texts**, or the ability to locate and use the information in documents such as job applications, pay forms, transportation schedules, maps, tables and graphics.

3. **The comprehension of texts with quantitative content**, or the ability to perform arithmetic operations, such as balancing a chequing account, calculating a tip or filling out a purchase order.

As part of the IALS, the tasks designed to measure reading skills were classified according to their degree of difficulty on a scale from 0 to 500 points. The scale was then divided into five general skill levels.

Level 1 indicates very low literacy skills, where the individual may, for example, have difficulty identifying the correct amount of medicine to give to a child from the information found on the package.

Level 2 respondents can deal only with material that is simple, clearly laid out and in which the tasks involved are not too complex. This is a significant category, because it identifies people who may have adapted their lower literacy skills to everyday life, but would have difficulty learning new job skills requiring a higher level of literacy.

Level 3 is considered as the minimum desirable threshold in many countries but some occupations require higher skills.

Levels 4 and 5 show increasingly higher literacy skills requiring the ability to integrate several sources of information or solve more complex problems. It appears to be a necessary requirement for some jobs.

(Statistics Canada*, 1996b, p. 4)

These areas, and the questions asked in order to measure them, were included in a new form. The second International Adult Literacy and Skills Survey (IALSS) was conducted on this new basis. Conducted ten years later in 2003 (Murray, Clermont and Binkley, 2005), the survey reaffirmed the adult literacy and skills data and will no doubt influence future adult literacy and literacy education research.

The general context of the research was such that the grassroots community groups, educational settings and government authorities conducted their studies according to their specific research goals using the general framework developed by the IALS. Accordingly, this survey had a major impact on the literacy and literacy education field of study, resulting in internal consistency in the field of study and practice, and fostering research complementarity, irrespective of the source of the research.

Finally, it should also be stressed that UNESCO's declaration of 1990 as International Literacy Year resulted in the federal government creating the NLS, which played a role in both directing the work for the IALS and in providing financial support for a number of Canadian French- and English-language literacy activities and research studies.

In short, the years from 1994 to 2005 were marked by International Literacy Year, declared by UNESCO in 1990. Although numerous groups from community and educational settings had already conducted research in the field of literacy and literacy education, the international action brought about a new wave of activity in this field of study. Canada played a key role in the international surveys and, as such, supported research efforts in every setting. The International Adult Literacy Survey (IALS) (Statistics Canada, 1995) and International Adult Literacy and Skills Survey (IALSS) (Murray, Clermont and Binkley, 2005) provided and continue to provide invaluable information to the field of study. In particular, the Canadian government's promotion of literacy was given concrete expression through the creation of the National Literacy Secretariat (NLS), which played an important role in funding the research studies indexed in the RÉCRAF.

2.2   Research Topics

As indicated in the introduction, nine topics were chosen for the purposes of codifying the research in the RÉCRAF database in mid-June 2005. Those topics will be addressed in depth in section 3, which will make it possible to provide a topical overview of French-language literacy research in Canada. We will confine ourselves to a few general aspects here.

Every topic covers different specific characteristics. Thus, *adult literacy* covers

research studies that provide general literacy-related data. They are statistical data from the 1994 IALS or data relating to history, policy and organizational aspects. Statistical data from the IALS relating to employment were classified under the topic *literacy and employment*. This topic covers all of the works on employment, on-the-job training and employability.

Aspects relating to the study of adults' needs, the obstacles to participation and success are covered by the topic *accessibility and retention*. The topic *literacy, numeracy and basic skills* focuses on reading- and writing-related behaviours, as well as training program appropriateness and assessment. As their names indicate, three topics, *literacy among Aboriginal peoples*, *literacy and health*, and *literacy and technology*, deal with aspects of literacy relating to First Nations, health and technology. *Family literacy* relates to adults as the parents of school-age children, whereas the topic *learners and educators* also deals with adults, but this time as learners or stakeholders in education and training.

Figure 2.2 shows the number of research studies per topic. The topic *accessibility and retention* is the one for which there are the most records (36, i.e., 23.5% of the corpus). In second place, the topic *adult literacy* (29, i.e., 19%) is in a dead heat with that of *literacy and employment* (29, i.e., 19%). However, the topic *literacy among Aboriginal peoples* has only one record, which reveals the lack of French-language research on this topic. All the other topics contain between 9 and 15 research studies, which represents an average of about one research study per year for the topics *literacy, numeracy and basic skills*, *literacy and health*, *literacy and technology*, *family literacy* and *learners and educators*. The topics containing the most records have an average of 2 to 3 publications per year.

Figure 2.2 – Number of publications per topic (N=153)

Category	Number of publications
Learners and educators	15
Family literacy	9
Literacy and technology	13
Literacy and health	9
Literacy and employment	29
Literacy among Aboriginal peoples	1
Literacy, numeracy and basic skills	12
Accessibility and retention	36
Adult literacy	29

Number of publications
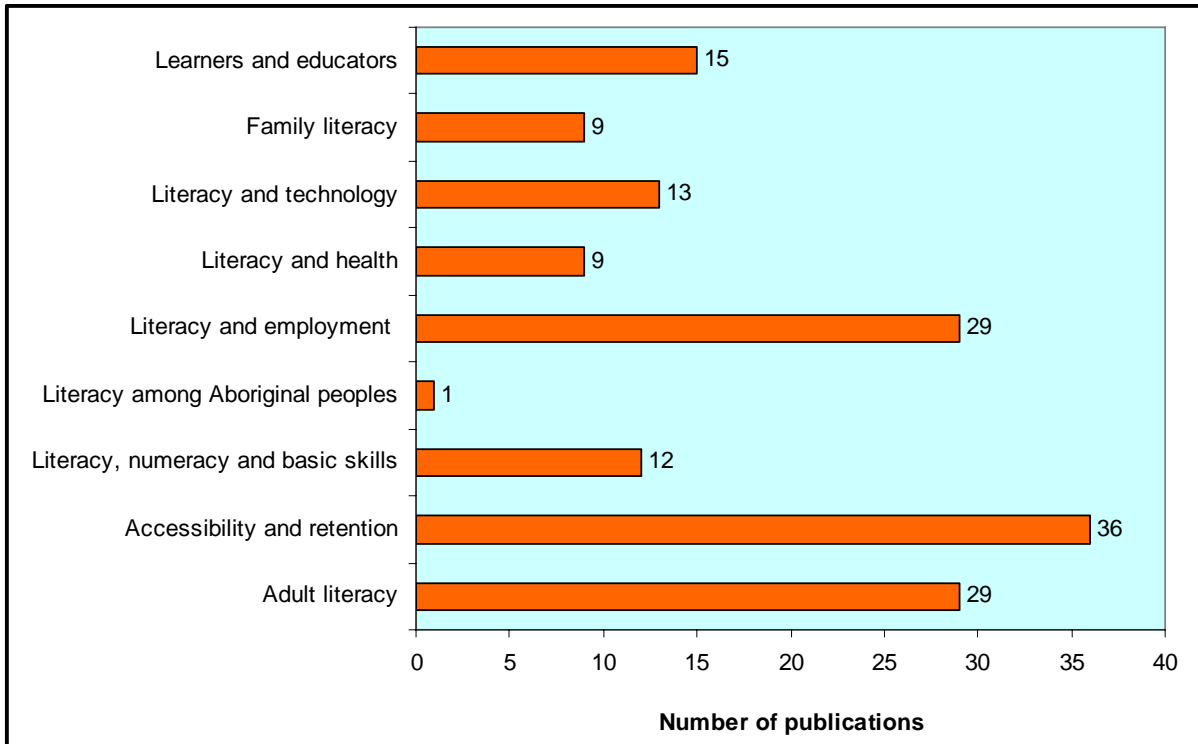
2.3   The Authors

By author, we mean the name of the individuals or organizations indicated under "author" in the document records in the RÉCRAF database and under "identifier" when the note *et al.* is specified. In order to determine the number of authors, we counted the list of authors, whether they were men, women or organizations, that took part in writing the indexed research studies. Two hundred and fourteen (214) individuals or organizations took part, between 1994 and 2005 (including research in progress), in writing the 153 publications in the RÉCRAF database. Figure 2.3a is a graph indicating the number of authors and the number of publications per year. This figure reveals that the year with the greatest number of authors is 2000, when 33 authors wrote 13 documents. The data also show that the number of authors is greater than the number of publications for 1997, 2000, 2001, 2002 and 2004, which are marked by works with multiple authors. Only the research studies in progress have almost as many authors as publications (10 versus 9).

In fact, of the 214 authors, 79% (170 authors) of them took part in writing a single document, whereas 21% (44 authors) contributed to more than one work. However, very few authors contributed to more than two works; there are only 12 of them. Of all the authors with more than one work to their credit, two are from government sources: Statistics Canada (3) and the NLS (2). Moreover, in addition to its 5 records, 7 other authors are from government authorities, which also includes one research study from the OECD. The authors of 7 other documents are organizations and not individuals. Figure 2.3b illustrates the distribution of authors with more than one work to their credit compared with those with only one. Then,

table 1 provides a list of individuals who contributed to more than three publications.

It is difficult to classify these authors according to the group to which they belong. Someone like Rachel Bélisle has long worked with grassroots community groups and community organizations, such as the Institut de coopération sur l'éducation des adultes (ICÉA), but she has also completed her doctorate and is now a professor at the Université de Sherbrooke. The same is true of Serge Wagner from the Université du Québec à Montréal, who did work for Statistics Canada, or Sylvie Roy, who has worked as a consultant for several years and for the ministère de l'Éducation du Québec. In fact, the number of publications by these authors mainly reflects their expertise in the field, and table 1 highlights their contribution.

Figure 2.3a – Number of authors and publications per year
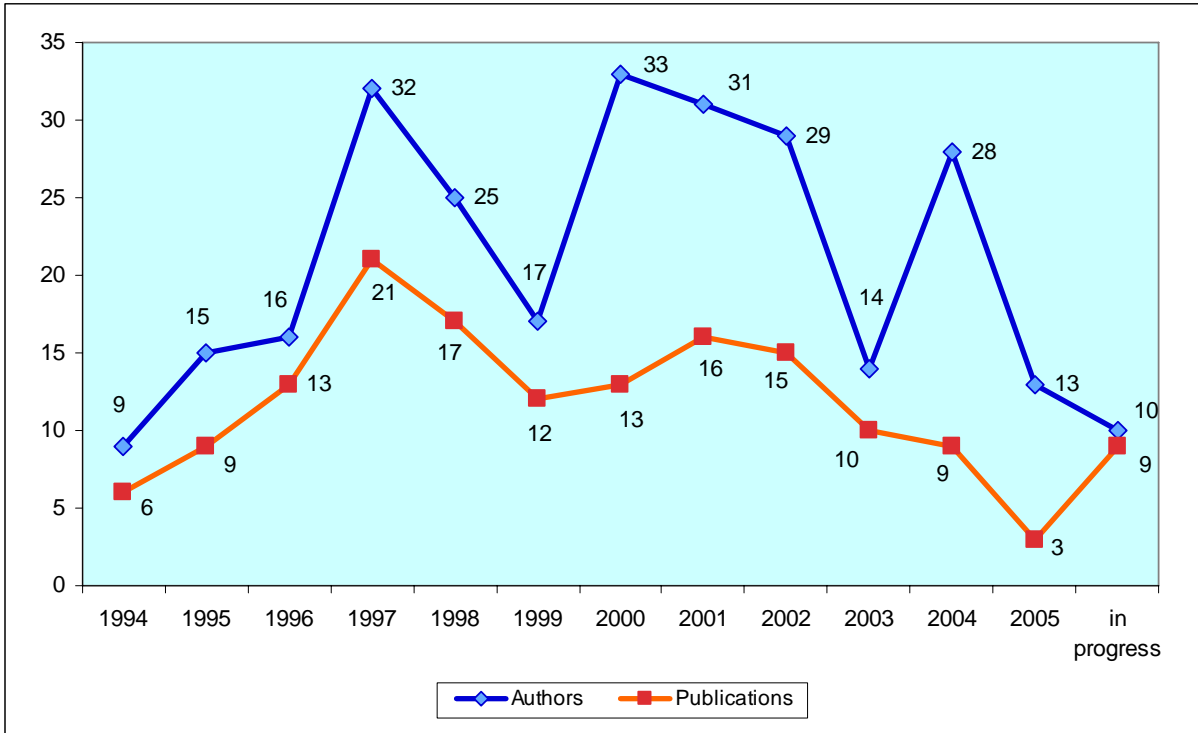
Figure 2.3b – Authors' contribution to writing a document
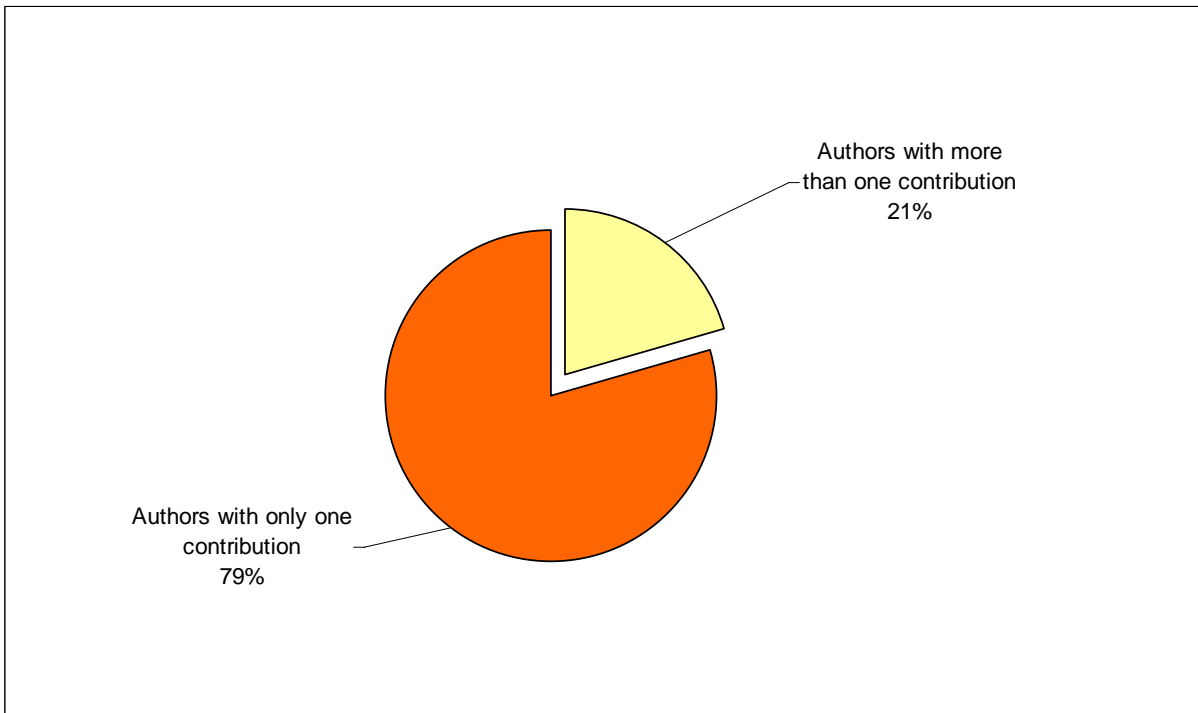
Table 1 – List of individuals who contributed to three publications or more

Roy, Sylvie:	5

Bélisle, Rachel: 4

Kapsalis, Constantine: 3

Kaszap, Margot:	3

Murray, T. Scott:	3

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Roy, Lucille:          3




Tuijnman, Albert:      3




Wagner, Serge:         3




Willms, J. Douglas:    3
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Figure 2.3c – Distribution of publications by type of setting
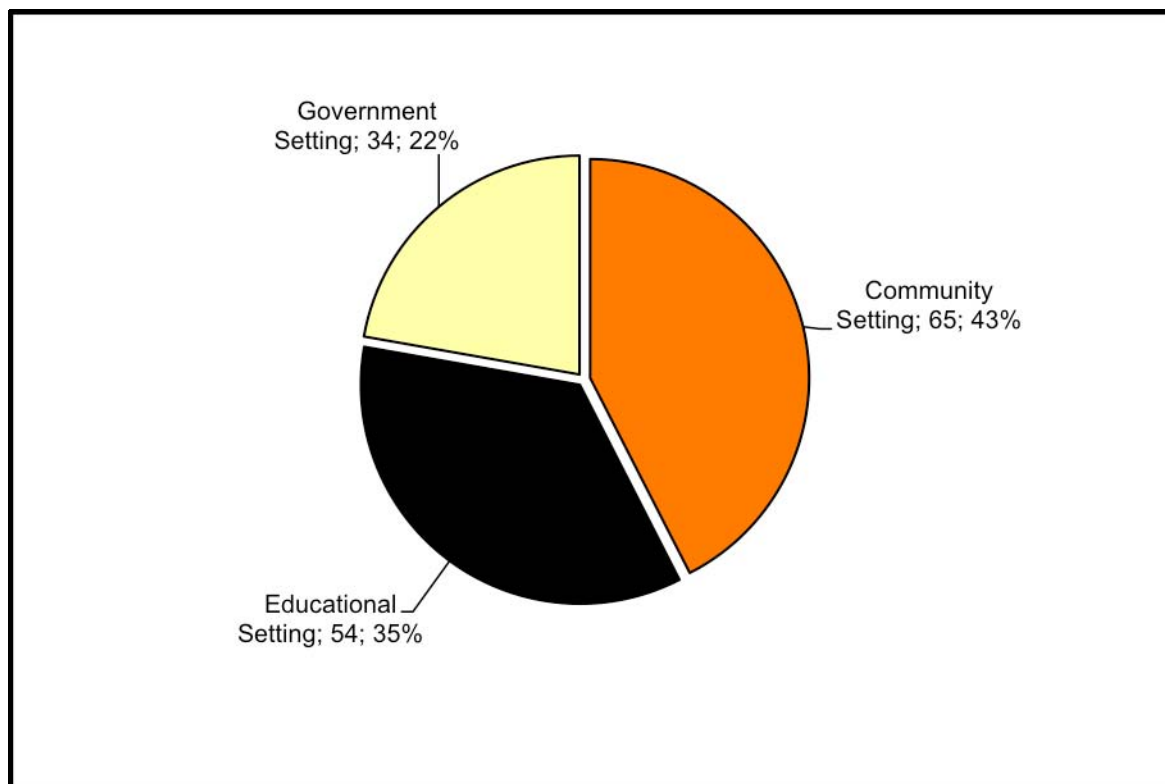
In closing this section on the authors of the research studies indexed in the RÉCRAF, the following sections (2.2.1, 2.2.2 and 2.2.3) contain some data on the authors' membership groups. The origin of the research request enabled classification: research done by a university researcher at the request of a grassroots community group is considered to come from that group; research done for the government will be classified in the government research category. According to our classification process, a thesis or dissertation comes from the educational setting in the same way as research done by professors without the collaboration of another organization. Thus, we have created three categories (see figures 2.3c and 2.3d):

- the **community setting**, which includes grassroots community groups and community organizations, but also any non-profit and non-university organization. Unions have been placed in this category;
- the **educational setting**, which includes ministries of education, school boards, school councils, colleges, universities and university research groups. Students who have written a thesis or dissertation, as well as research institutions, fall into this category;
- the **government setting**, which includes any federal or provincial government agency.

Figure 2.3d – Publications per year by type of setting

Figure: Bar chart showing number of publications by setting (Community Setting, Educational Setting, Government Setting) from 1994 to 2005 and "in progress".

Year	Community Setting	Educational Setting	Government Setting
1994	3	1	2
1995	6	2	1
1996	6	4	3
1997	10	6	5
1998	6	6	5
1999	7	3	2
2000	4	4	5
2001	8	4	4
2002	7	6	2
2003	5	5	
2004		7	2
2005		1	2
in progress	3	5	1
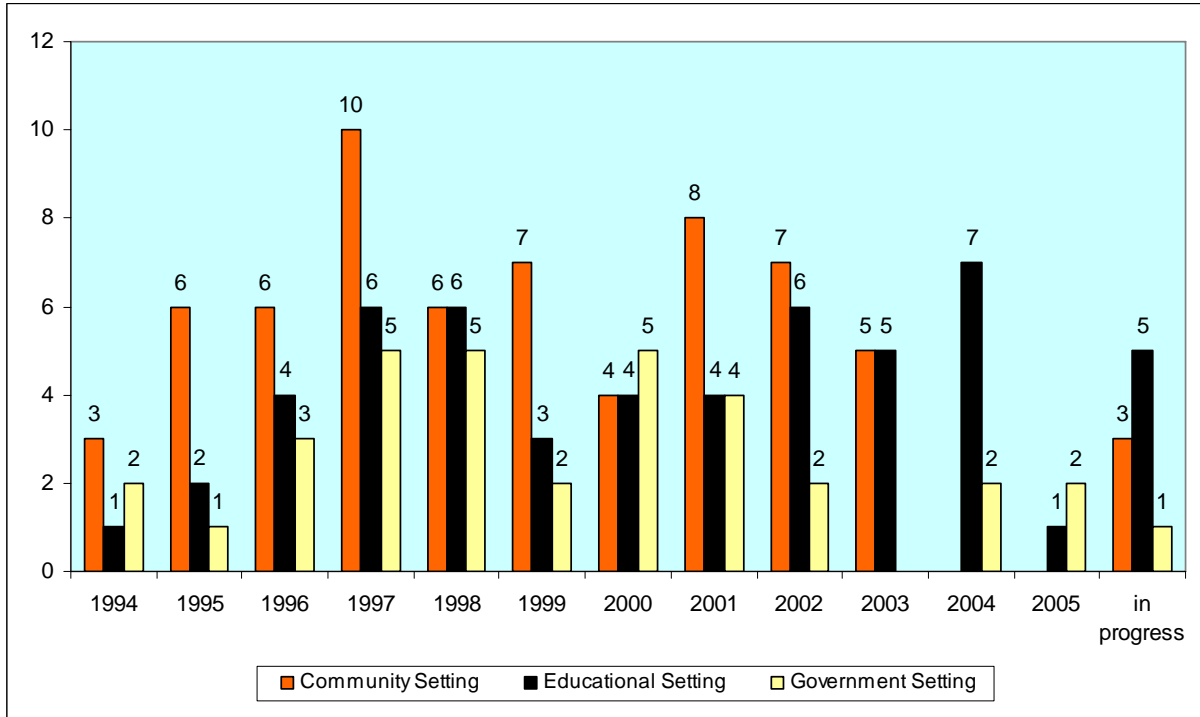
2.3.1 Community Setting

Of the three categories, the community setting is one of the major stakeholders. With its 65 research studies, its contribution makes up 42.5% of French-language research efforts in the field in Canada and makes it the most productive setting in terms of the number of research studies. This contribution is also officially recognized by various government and educational authorities, although according to the groups, the grants they receive do not always meet their needs. Grassroots community groups are actually most successful at reaching illiterate adults or adults with low literacy levels, and the results of this overview reveal that they also play a very important role in research.

Figure 2.3.1 shows the number of publications per topic produced in this setting, which indicates that the goals being pursued are closely linked to their raison d'être, namely intervention with illiterate individuals and individuals with low literacy levels, since most of the research studies (22, i.e., 33.8%) deal with the topic *accessibility and retention*.

The other topics most studied are *literacy and employment* (13, i.e., 20%); *literacy and technology* (8, i.e., 12.3%), which reveals the community setting's desire to integrate technology into literacy education practices; and *learners and educators* (7, i.e., 10.8%). The topics *literacy, numeracy and basic skills* and *adult literacy* each include 5 publications (7.7 %). *Family literacy* and *literacy and health* represent 4.6 % (3) and 3.1% (2) of the publications, respectively, which suggests that few grassroots

community groups have done studies on these issues. Moreover, no Francophone group has done research on literacy among Aboriginal peoples; it should be said here that community groups in Aboriginal settings mainly use English as their language of communication and publication.

Figure 2.3.1 – Number of publications per topic associated with the community setting (N=65)
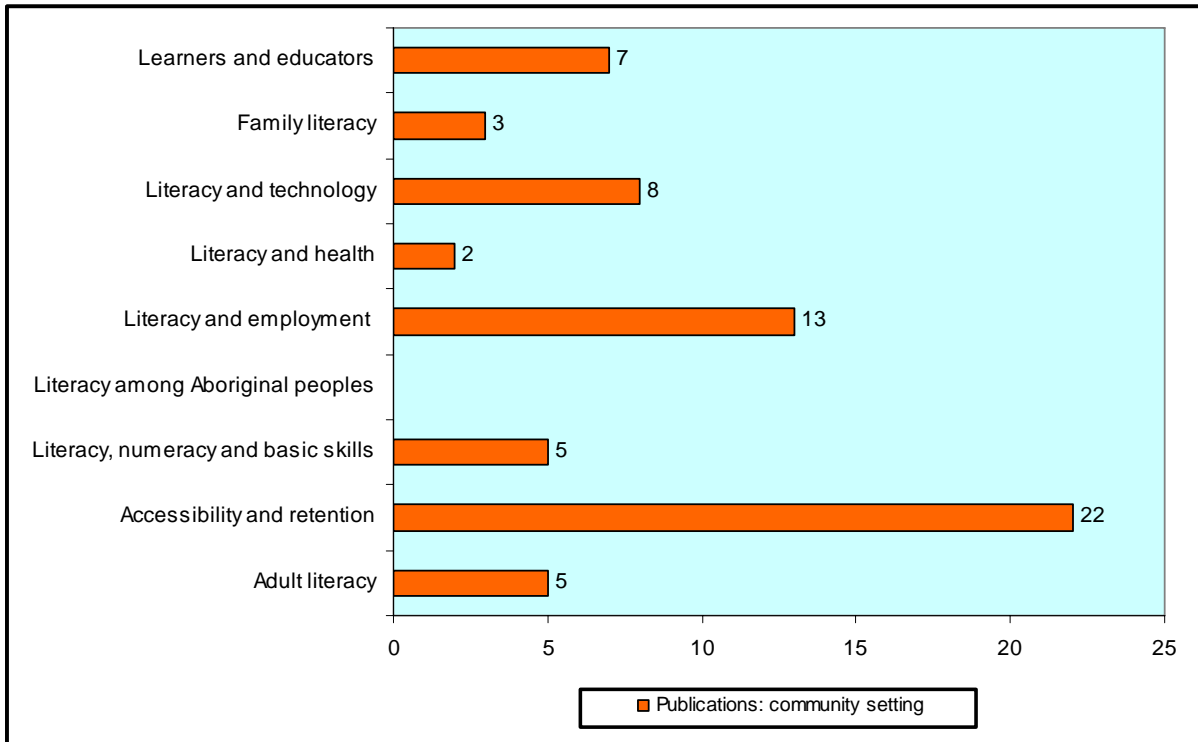
By and large, the work done in the community setting focuses on the groups' concerns. In our opinion, this attests to a great deal of consistency between theory and practice. For grassroots community groups, the research results must fuel their intervention methods.

2.3.2 Educational Setting

There are a number of different stakeholders in the educational setting: ministries of education, school boards or councils, colleges, universities, research groups and institutions, and graduate students. It has contributed to 54 research studies, i.e., 35.3% of the publications in the RÉCRAF index, which makes it the second largest stakeholder in terms of the number of research studies.

Figure 2.3.2 shows an interesting representation of the breakdown of research studies done in the educational setting. This setting produced the one and only

publication on literacy among Aboriginal peoples and, apart from the topic *literacy and technology*, which contains only 2 research studies (3.7%), there are at least 6 publications (11.1%) for each of the other topics. Three topics have slightly more: *accessibility and retention* (11, i.e., 20.4%); *learners and educators* (8, i.e., 14.8%); and *adult literacy* (8, i.e., 14.8%).

Figure 2.3.2 – Number of publications per topic associated with the educational setting (N=54)
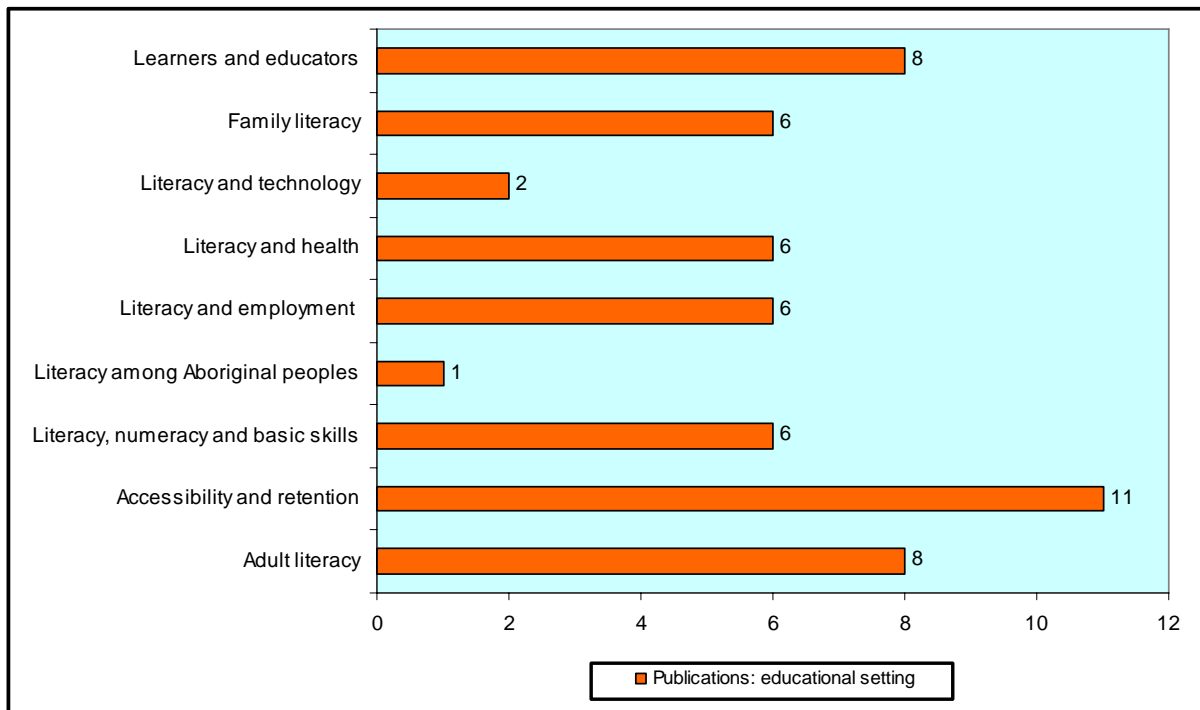
In this category on the educational setting, we should highlight the number of theses (14) and dissertations (4) written by students from different universities, i.e., nearly one third (33.3%) of the work in this setting. What sets that research apart is that, on the one hand, it may be about communities other than those residing in Canada (Burkina Faso, for example) and that, on the other hand, it does not relate to a clientele served by the institution.

2.3.3 Government Setting

The government setting produced 34 research studies, which represents 22.2% of the corpus. The concentration of publications on the topics *adult literacy* (16, i.e., 47.1%) and *literacy and employment* (10, i.e., 29.4%) clearly reveals the government's concerns, namely gaining a better understanding of the community's position on the literacy scales, on the one hand, and addressing the economic situation of those with low literacy levels and of the country, on the other hand. No

contribution has been made to three topics: *learners and educators*, *family literacy* and *literacy among Aboriginal peoples*. There are only one to three research studies for each of the other four topics.

Figure 2.3.3 – Number of publications per topic associated with the government setting (N=34)
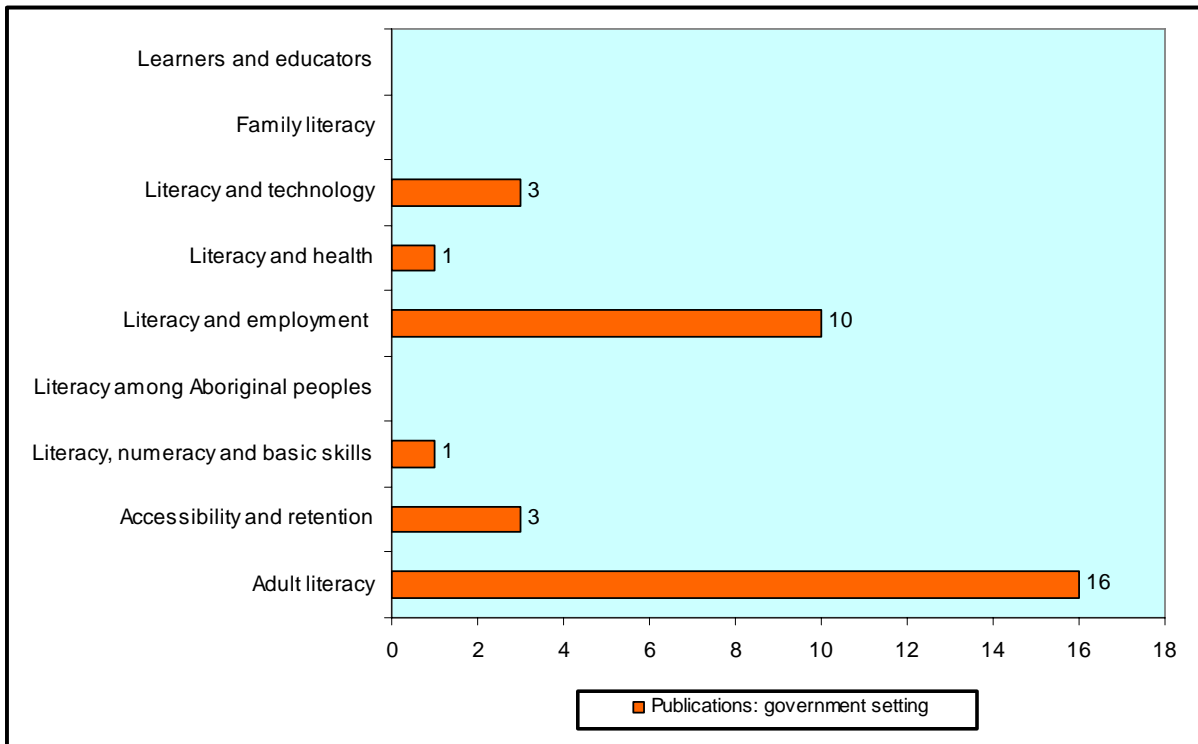
In short, there are 214 authors for the 153 research studies in the RÉCRAF database. Twenty-one percent (21%) of them contributed to more than one publication, thereby increasing the number of authors for 1997, 2000, 2001, 2002 and 2004. However, few of them contributed to more than two works (12). Various settings contributed to developing this critical mass of research:

1. The community setting was the most prolific with 65 research studies, i.e., 42.5% of the publications, publications that reflect the setting's major concerns, which are associated with intervention;

2. The educational setting comes in second with 54 research studies for 35.3% of the works. Research in this setting falls into each of the topics and several works are master's theses and doctoral dissertations (18);

3. The government setting is the least prolific when it comes to the number of publications (34, i.e., 22.2%), and it is the most specialized in terms of the topics of interest: knowledge of the level of adult literacy and the connection between literacy and employment. Its contribution also plays a major role by providing a set of basic data and statistics for use in numerous other research studies.

Thus, each setting contributed to increasing the knowledge of literacy and literacy education according to its particular focus and characteristics.

2.4 Publication Years

We will now turn to the publication years. In almost 12 years, the average number of publications per month is slightly more than one (1), which corresponds to 13.3 research studies per year. Figure 2.4 provides a visual representation of the number of publications per year.

After strong growth from 1994 to 1997, i.e., the years following the IALS, the amount of literacy research declined slightly. After 1997, when 21 documents were published, there was a drop in research, except in 1998, 2001 and 2002. On a time horizon of 12½ years, from 1994 to mid-June 2005, 18% of the 153 research studies were published prior to 1997; 25% in 1997 and 1998; 26% in 1999, 2000 and 2001; and 25% from 2001 to mid-June 2005.

In short, the RÉCRAF database reveals that the most prolific years were 1997, 1998, 2001 and 2002. The average number of publications per year is 13.3 and, except for the first year and the current year (1994 and 2005), the minimum number of research studies indexed per year is 9 publications.

Figure 2.4 – Breakdown of publications per year (January 1994-June 2005)
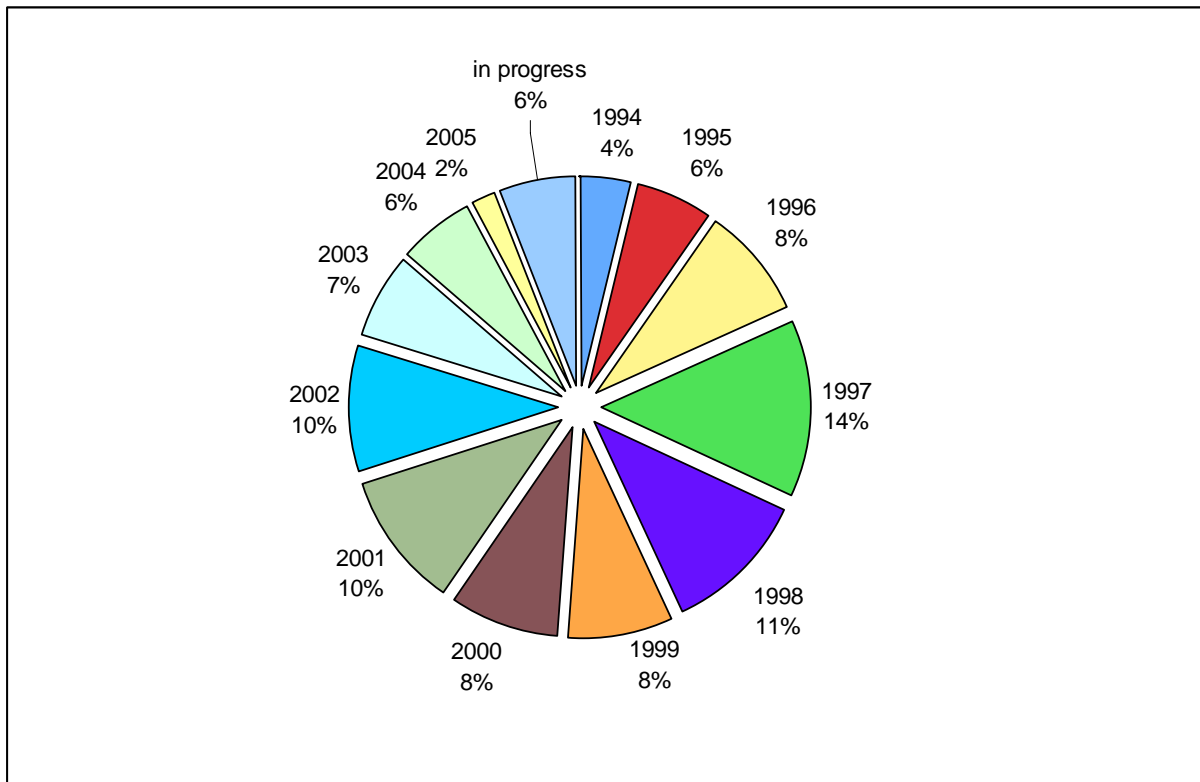
2.5   Research Types

As regards the types of research, we coded each record according to the type of methodology used: quantitative only, qualitative only or mixed (both). This information was found in the abstracts and, unless expressly indicated, any reference to individual or group interviews was coded as belonging to the qualitative methods.

This treatment created a picture of research practices in the literacy field as indicated by the histogram in figure 2.5a, which also breaks down the data by publication year.

A quick glance at the figure reveals that qualitative approaches are the most numerous by far. Indeed, 83 of the 153 research studies (54.2%) are of this type, while 39 (25.5%) are quantitative and 31 (20.3%) are mixed. That is to say that over half use a qualitative methodology.

Qualitative approaches are therefore favoured. They typically involve individual or group interviews and discussion groups. Some research studies set themselves apart by using a different methodology, such as a documentation content analysis or the discussion of a specific subject (for example, Nombré, 1997).

Figure 2.5a – Research type by publication year
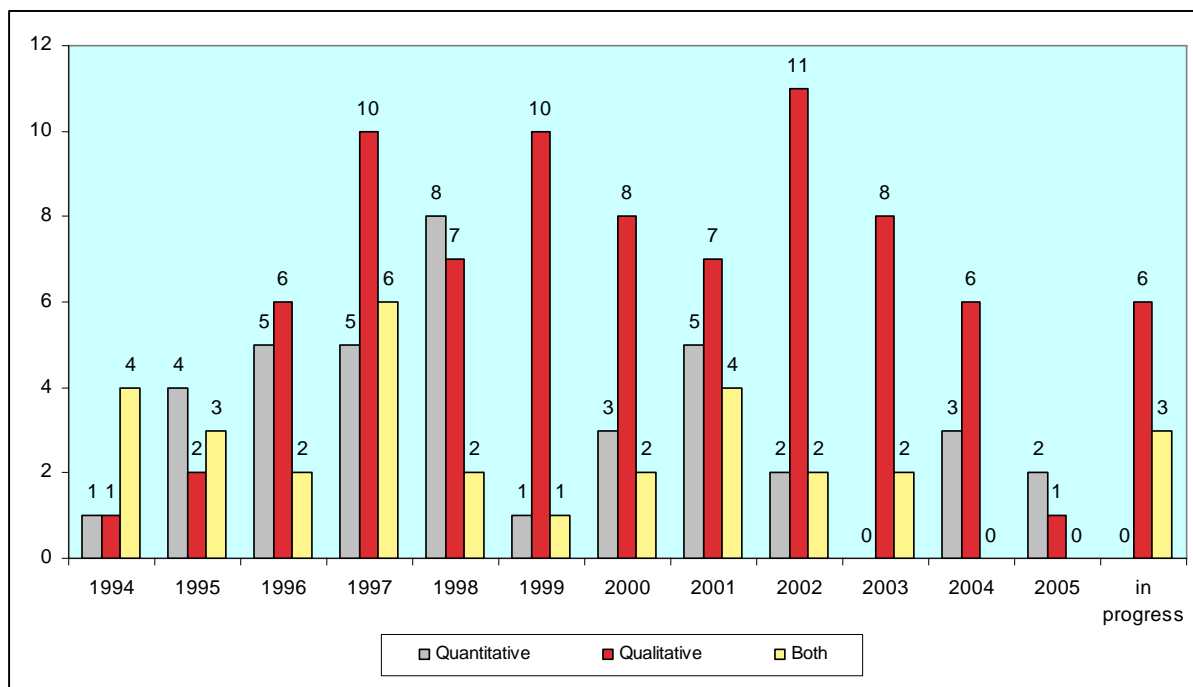
The predominance of qualitative studies is not surprising in the literacy field. Indeed, the illiterate and individuals with low literacy levels would have difficulty with quantitative techniques unless someone acted as an intermediary to explain the meaning of the questions, which would require a substantial research budget. Moreover, although quantitative research is more costly during data collection tool development and less costly during data processing, it does, however, require large digital samples in order to produce reliable statistical analysis, which is sometimes prohibitive for some research groups. Qualitative approaches also offer richer data when it comes to supporting initiatives in the setting and interventions. These are so many reasons in support of the use of qualitative approaches, and it comes as no surprise that the research conducted in the community setting (56.9%) and educational setting (79.6%) is mainly qualitative, as illustrated by figure 2.5b and table 2.

It is therefore no surprise that less research was done using quantitative approaches and, furthermore, that the existing research is more characteristic of government organizations (76.5%). In fact, the RÉCRAF database includes 18 quantitative documents that are noted under the "type of document" heading as being statistical studies. Most of these studies relate to the IALS.

Figure 2.5b – Type of research by type of setting

Type of research (y-axis)

Quantitative and Qualitative:
- Government Setting: 5
- Educational Setting: 7
- Community Setting: 19

Qualitative:
- Government Setting: 3
- Educational Setting: 43
- Community Setting: 37

Quantitative:
- Government Setting: 26
- Educational Setting: 4
- Community Setting: 9

x-axis: 0 5 10 15 20 25 30 35 40 45 50

Legend: ■ Community Setting ■ Educational Setting □ Government Setting

Table 2 – Percentage of research types by setting

	Quantitative Only	Qualitative Only	Both	Total

Community Setting	13.8%	56.9%	29.2%	100%
Government Setting	76.5%	8.8%	14.7%	100%

As for mixed research, which combines both quantitative and qualitative elements, it should be noted that the research studies indexed in the RÉCRAF database often use the results of the IALS and then turn to a qualitative methodology in order to better understand the situation, generally in order to better serve adults with low literacy levels.

The community setting, which, as we have seen, is responsible for 42.5% of the research in the RÉCRAF database, and the university setting (including 4 dissertations and 14 theses) use mainly qualitative or mixed approaches. Outreach facilitation by groups and the development of their intervention expertise serve as the basis for research methodology selection. The literacy research field is therefore indebted to them for being able to combine practice and research with a view to understanding the situations and contexts in which illiterate and under-educated individuals find themselves.

In short, 83 research studies (54.2%) are qualitative, whereas 39 (25.5%) are quantitative and 31 (20.3%) are mixed. The community and educational settings favour qualitative approaches, while the government setting has produced

quantitative research.

2.6 Funding Sources

It is difficult to provide an exhaustive analysis of funding methods; the information is sometimes not entered on the data records and, more often than not, there are several funders. That is the case for 17% of the research. We therefore drew up a description based on the primary source when the information was available. The data so processed reveal that 44.4% of the 153 publications received support, either exclusive or not, from either the NLS (31 research studies: 20.3%), or from the Initiatives fédérales-provinciales conjointes en matière d'alphabétisation (IFPCA: 37 research studies, i.e., 24.2%). So, those are two major players in the granting of financial support for research in the field of literacy. Figure 2.6 illustrates those data. It should be noted that, apart from the NLS and the IFPCA, there is a third major player in research funding. The combination of Statistics Canada and NLS-HRDC actually supported 24 research studies, i.e., 15.7%. There is no funding information for only 3.3% (5) of the documents. It is also interesting to note that 11.8% come from master's theses (14) and doctoral dissertations (4) in university settings. It should also be noted that these research studies are often funded using the students' personal resources (loans and grants). The balance of the research studies (38, i.e., 25%) was funded by numerous and varied sources that, together, represent 24.8% of the database: ministère de l'Éducation du Québec (4); the Canadian provincial ministries in charge of training and employment (4); Social Sciences and Humanities Research Council (3); and other various sources such as the Office of Learning Technologies, unions, school boards and the Health Fund.

In short, the funding sources are mainly governmental in 60.1% of the research studies, especially through the NLS (20.3%) and the IFPCA (24.2%). There is no information for 3.3% of the records and 11.8% of the research was done in a university context and funded by various sources.

Figure 2.6 – Funding sources for the research studies in the RÉCRAF
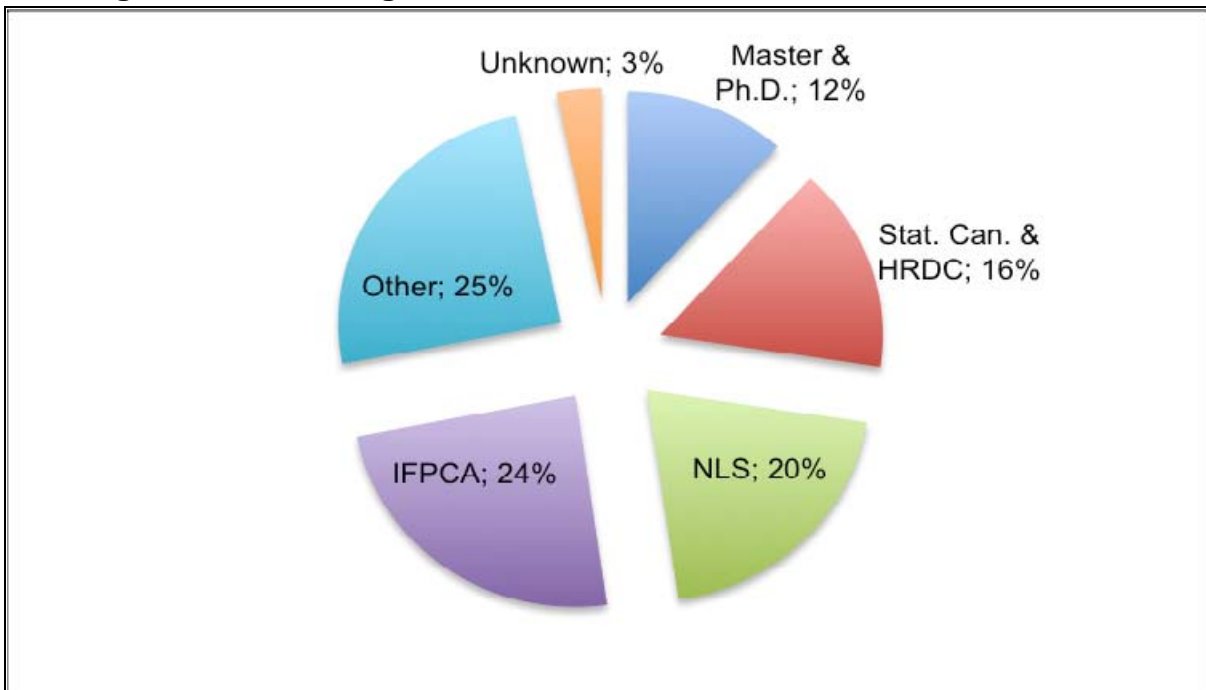
2.7   Places of Production

In this section, we will provide an overview of the research studies in the RÉCRAF database according to the places of publication and production.

As can be seen in figure 2.7a, a vast majority of the 153 records come from either Quebec (96: 62%) or Ontario (43: 28%). British Columbia, Manitoba and New Brunswick contribute to the output with a combined total of 5.2% (8 records), as revealed more precisely in figure 2.7b. The "Quebec" section includes one (1) research study that relates to both Quebec and Ontario (Dubuisson, 2004), but, for statistical purposes, and because it related mainly to Quebec (the identifiers being the MEQ, the Centre de communication adaptée and Quebec Sign Language), it was included in the records for Quebec. The "other" section includes a document comparing Canada and the United States (Willms, 1999) and another with Sweden (Kapsalis, 2001), as well as 4 documents with Canada and France (Ottawa and Paris) as their places of publication.

Figure 2.7a – Number of publications per province
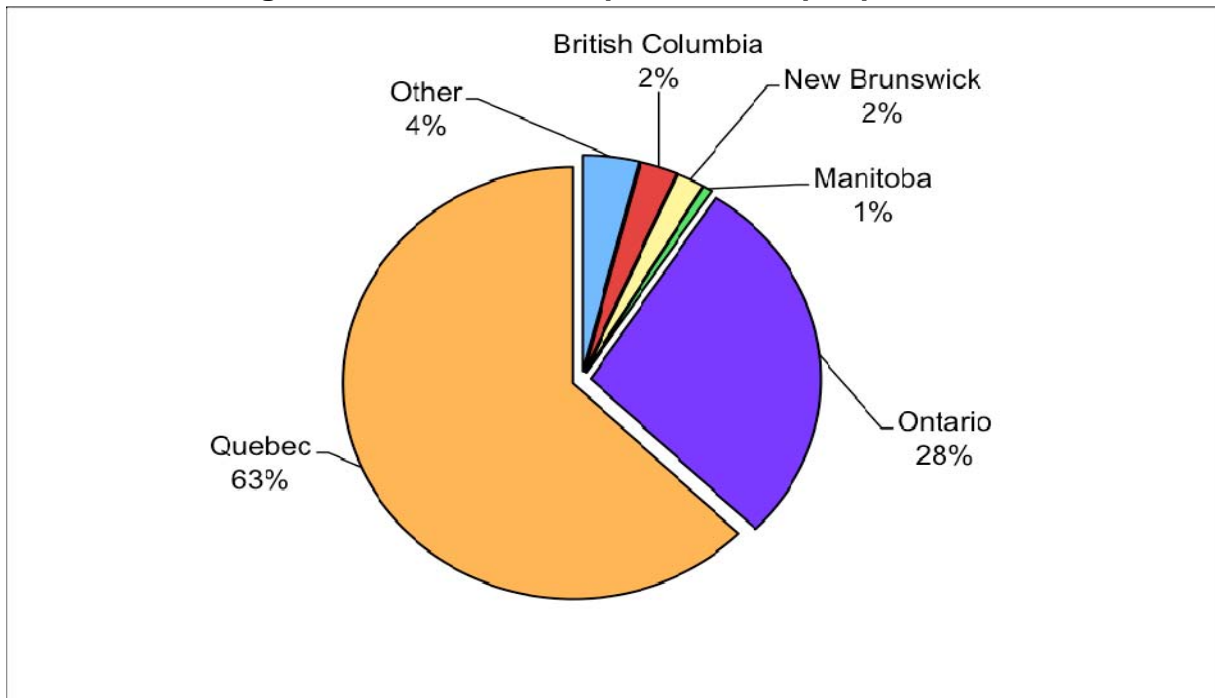
Figure 2.7b offers a cross-reading of the places and settings of production. This figure reveals that the vast majority of research in Quebec is done in the community and educational settings, whereas the government and community settings dominate in Ontario. In British Columbia and Manitoba, only the community setting engaged in research activities, whereas research was done in the educational and government settings in New Brunswick. In the latter three cases, no more than three works were completed in the entire period covered by this overview. The "other" section includes a total of 6 publications, including one from the government setting with Canada as the place of publication; 4 from a collaboration between Ottawa and Paris (government setting); and one record, from the educational setting, that does not indicate a place of publication.

Figure 2.7c reveals significant French-language output in Quebec, but its proportion compared with the whole varies. In general, Quebec contributed over 50% of the publications, except in 1995 (44%), 2000 (46%) and 2005 (33%). Considering the large number of publications from Quebec (62% of the output), we carried out a more detailed analysis of the places of production for that province. Of the 96 research studies published in Quebec, 45 are from the community setting, 45 from the educational setting and 6 from the government setting (figure 2.7b).

Figure 2.7b – Distribution of settings by place of production (N=153)

Legend: ■ Community Setting □ Educational Setting □ Government Setting

Quebec: Government 6, Educational 45, Community 45
Ontario: Government 22, Educational 6, Community 15
Manitoba: Community 1
New Brunswick: Government 1, Educational 2
British Columbia: Community 4
Other: Government 5, Educational 1
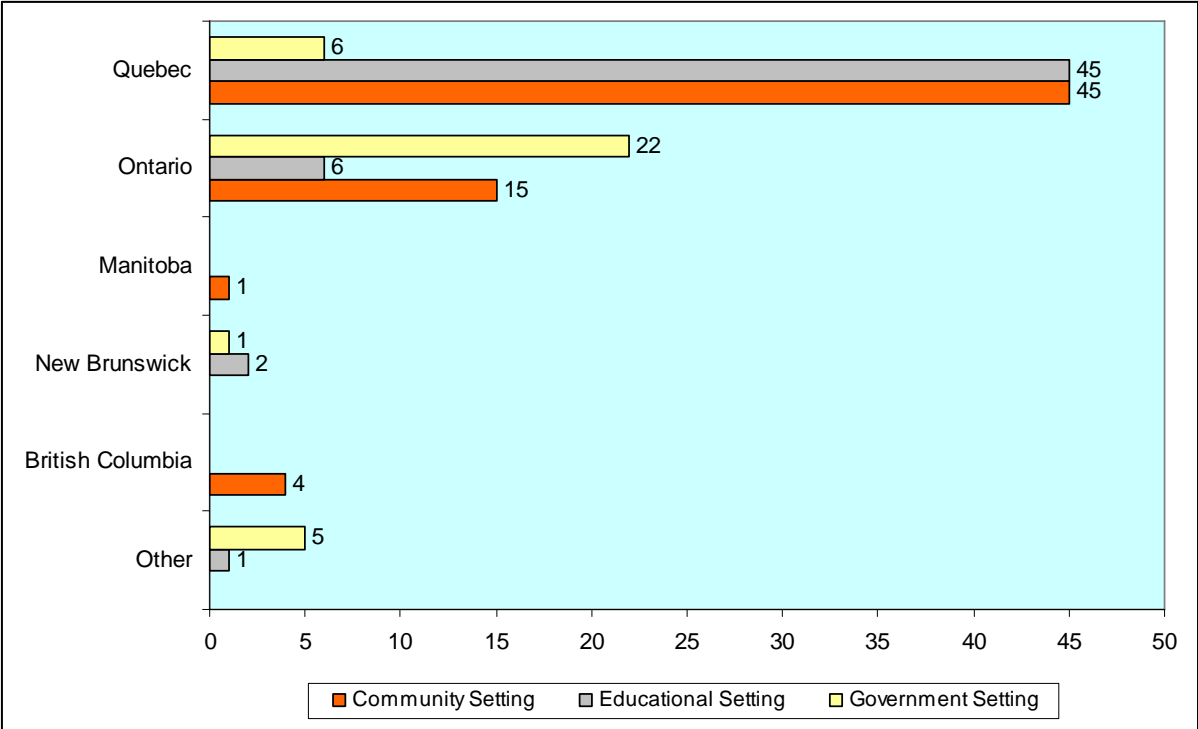
Figure 2.7c – Publications from Quebec compared with all of the publications by year

Legend: ■)In Quebec only (N = 96   ■)All of Canada (N = 153

Year	In Quebec only	All of Canada
1994	5	6
1995	4	9
1996	7	13
1997	11	21
1998	9	17
1999	9	12
2000	6	13
2001	12	16
2002	9	15
2003	9	10
2004	6	9
2005	1	3
in progress	8	9
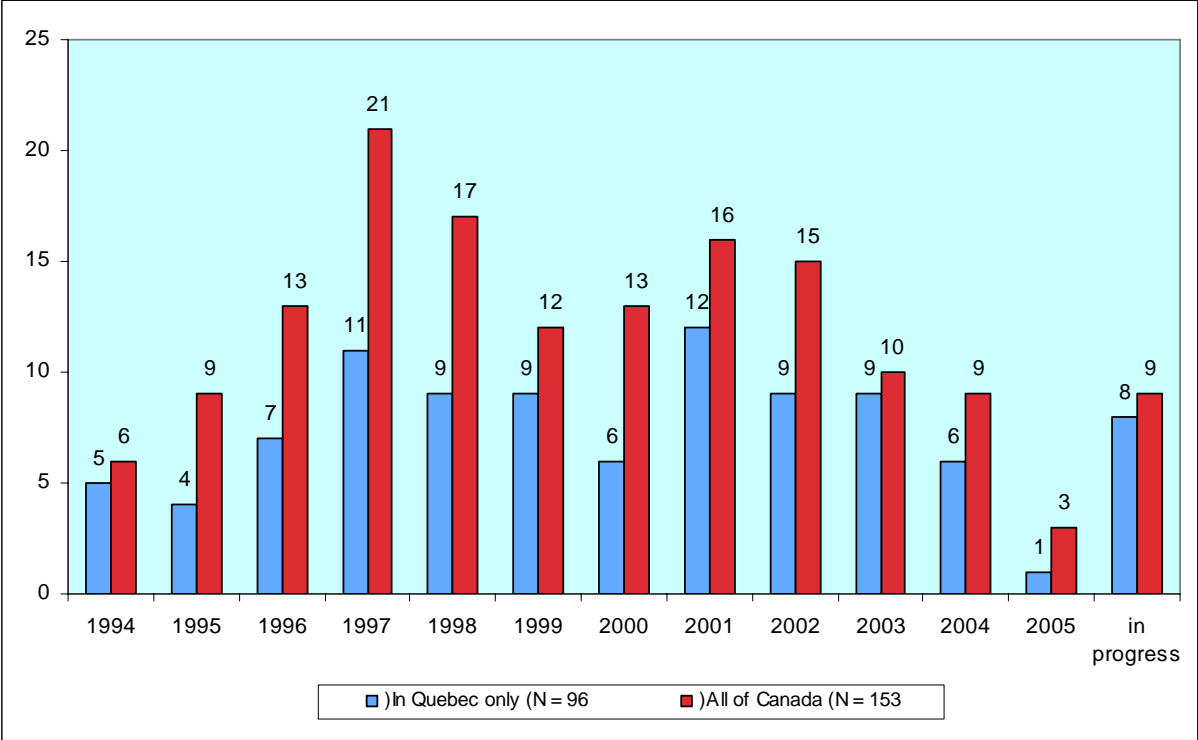
Figure 2.7d – Distribution of research studies by topic for Quebec

Topic	Publications from Quebec
Learners and educators	10
Family literacy and literacy among young children	8
Literacy and technology	8
Literacy and health	5
Literacy and employment	16
Literacy among Aboriginal peoples	
Literacy, numeracy and basic skills	12
Accessibility and retention	26
Adult literacy	11

Publications from Quebec
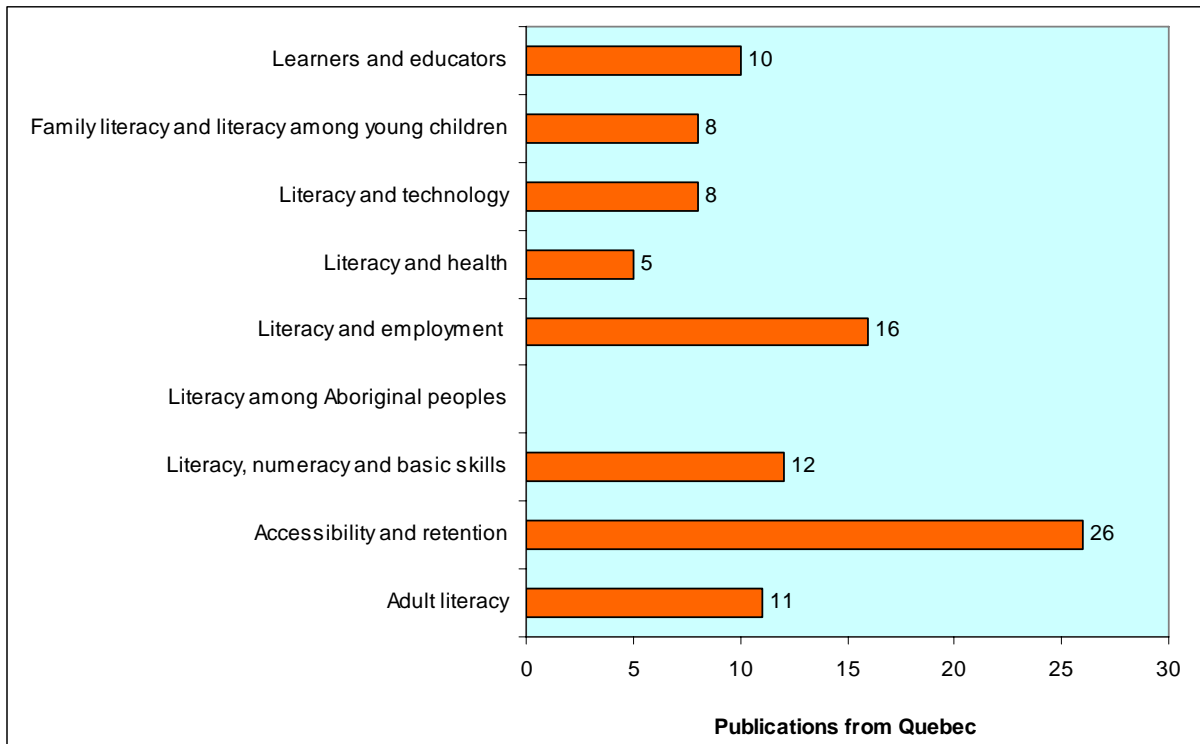
Figure 2.7d provides further information on Quebec as concerns the breakdown of the works by topic. Here, much like the importance of the production settings, the topic *accessibility and retention* is dominant with 26 research studies (27.1% of publications from Quebec), followed by *literacy and employment* with 16 records (16.7%). The next three topics with the most records are *literacy, numeracy and basic skills*, *adult literacy* and *learners and educators*.

In short, the places of publication vary, but most of the research was done in Quebec (62%) and Ontario (28%). The other provinces contributed 6% of the publications: British Columbia (3%), New Brunswick (2%), Manitoba (1%), and 4% of the output is mixed between Canada and France. In Quebec, the community and educational settings are the driving forces behind the research, whereas in Ontario, the government and educational settings produce the most work, which includes the major Canada-wide surveys. The research topics, depending on the places of publication, are therefore coloured by the predominance of the setting that conducts the most research.

2.8   Conclusion: A Dynamic Summary Overview

The French-speaking community has been concerned about the field of study of literacy and literacy education for a good many years. The RÉCRAF provides an index of the research studies that have been conducted since 1994 and thereby offers the means to draw up a summary overview of the research studies included in its database. The overview was developed from the 153 information records available in mid-June 2005.

The research studies in question were conducted between 1994 and 2005 (including research "in progress"), which are years marked by the effects of International Literacy Year, declared by UNESCO in 1990. Although many groups from community and educational settings had already conducted research in the field of literacy and literacy education, the international action brought about a new wave of activity in the field of research. Canada played a key role in the international surveys and, as such, supported research efforts in every setting. The IALS (Statistics Canada, 1995) and International Adult Literacy and Skills Survey (IALSS) (Murray, Clermont and Binkley, 2005) provided and continue to provide invaluable information to the field of study. In particular, the Canadian government's promotion of literacy was given concrete expression through the creation of the NLS, which played an important role in funding the research studies indexed in the RÉCRAF, most of which comes from the community setting.

Those research studies are the work of 214 individuals or organizations, with 21% of them contributing to more than one publication. That work was done in various settings:

- The community setting was the most prolific with 65 research studies, i.e., 42.5% of the publications, which reflect the setting's major concerns, which are associated with intervention;
- The educational setting comes in second with 54 research studies for 35.3% of the works. Research in this setting falls into each of the topics and several works are master's theses and doctoral dissertations;
- The government setting is the least prolific when it comes to the number of publications (34, i.e., 22.2%), and it is the most specialized in terms of the topics of interest. Its contribution does, however, play a key role in the knowledge of the level of adult literacy and its connection with employment.

Thus, each setting contributed to increasing the knowledge of literacy and literacy education according to its particular focus and characteristics.

The RÉCRAF database reveals that the most prolific years were 1997, 1998, 2001 and 2002. The average number of publications per year is 13.3 and, except for the first year and the current year (1994 and 2005), the minimum number of research studies indexed is 9 publications.

Eighty-three research studies (83, i.e., 54.2%) are qualitative, 39 (25.5%) are

quantitative and 31 (20.3%) are mixed. The community and educational settings favour qualitative approaches, whereas research in the government setting is marked more by quantitative approaches.

The places of publication vary, but most of the research was done in Quebec (62%) and Ontario (28%). In Quebec, the community and educational settings are the driving forces behind the research, whereas in Ontario, the government and educational settings produce the most work.

The funding sources are mainly governmental in 60.1% of the research, especially through the NLS (20.3%) and the IFPCA (24.2%). There is no information for 3.3% of the records and 11.8% of the research was done in a university context.

Some research topics contain more records than others. In order of abundance, the count stands as follows:

1. Accessibility and retention: 36 (23.5%);
2. Adult literacy: 29 (19%);
3. Literacy and employment: 29 (19%);
4. Learners and educators: 15 (9.8%);
5. Literacy and technology: 13 (8.5%);
6. Literacy, numeracy and basic skills: 12 (7.8%);
7. Literacy and health: 9 (5.9%);
8. Family literacy: 9 (5.9%);
9. Literacy and Aboriginal peoples: 1 (0.7%).

The topics with between 9 and 15 research studies average about one research study a year, whereas the topics containing the most records average 2 to 3 publications annually.

3. TOPICAL OVERVIEW OF LITERACY RESEARCH IN CANADA

This part of the report provides an overview of the research according to each of the selected topics. We begin by going over the methodology used to develop the topics and classify the records, and then provide a summary of each topic.

Considering that one of the purposes of the desired summary was to provide a description of French-language research, which was not included in the work done by Patricia Campbell* (2002), we first started with the categorization process that author had used to summarize the English-language documents. That list was discussed during a meeting with the RÉCRAF advisory committee, and a few changes were made to factor in the development of the Canadian Knowledge Centres, which were being established at the time this report was written. The final changes were made together with the advisory committee members over the Internet. Then, the categorization was put to the test of classification. The team of three researchers worked as follows: two of the researchers classified the research records separately. Those records that had not been classified the same way were then reviewed by the third person, and a working meeting was held to ratify the classification. Each record was classified in a single category, with each category corresponding to a topic.

The categories used provide structure for the topical analysis work that follows. Each section therefore deals with one of the topics and begins with general information about that topic. This is followed by a summary analysis of the research, which was done using the records in the RÉCRAF database. The topic summary is provided at the end of the section and is followed by a bibliography of the research studies for the topic.

3.1   Adult Literacy

Topic 1 on adult literacy consists of 29 publications over the 12 years of research. There is at least one publication per year, but the vast majority of the years have two or three, for an annual average of 2.23. Of the 29 publications, 18 centre on the 1994 IALS or the subsequent literacy and basic skills survey in 2002 and 2003 (IALSS), which makes it by far the largest sub-topic. In fact, this sub-category would be even more substantial if all of the research based on those surveys had been classified under the topic of adult literacy. Several of the publications deal mainly with the economic aspects and the effect of literacy education on employment; they were therefore classified under topic 5, *literacy and employment*.

The 11 other research studies deal with various aspects of history and policy, and with organizational aspects. These various sub-topics are set out below. We begin with the publications concerning the "data from the international surveys" (17), followed by the sub-topics of "policies and structures" (8) and "conceptual approaches and foundations" (4).

Figure 3.1 – Distribution of adult literacy research studies by year (N=29)
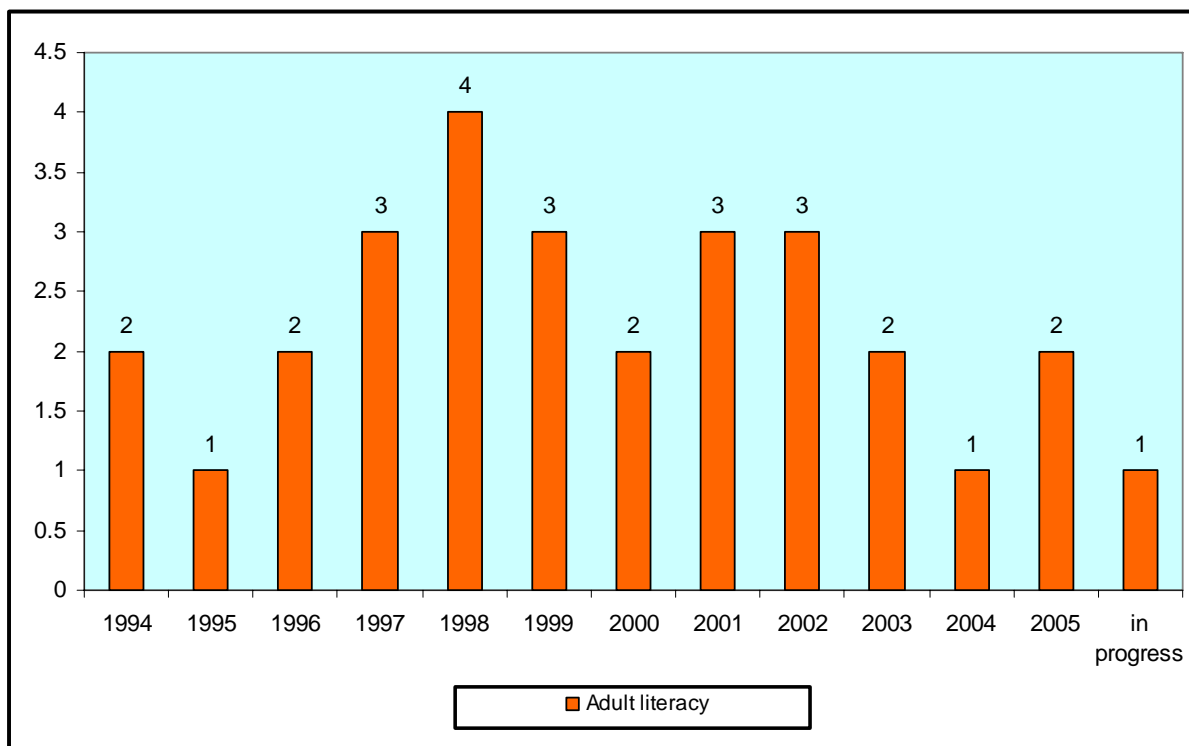
3.1.1 Data from the International Surveys (IALS and IALSS)

Seventeen (17) of the 18 research studies relating to the IALS and IALSS are included in this sub-topic. It was not easy to classify these publications in this category, since the research relating to the international surveys provides information, in one way or another, on literacy level; regional, language or gender differences; and the effect of literacy on employment and income. The research studies in this section has been included because of their focus on raw, generally statistical data, with the intention of promoting the development of policies that would improve the skills of adults. The very centrality of descriptive quantitative data is the reason why the research studies based on the 1989 Canadian Survey of Literacy Skills Used in Daily Activities (LSUDA) or the one on adult literacy and skills (IALSS from 2003) were also classified here.

Of the 17 publications classified in this category, 14 were published by a federal agency, mainly Statistics Canada, which managed the survey on behalf of the NLS in cooperation with the OECD, Eurostat and UNESCO (Statistics Canada*, 1996b). The other three research studies come from Ontario agencies: two from Centre FORA (Centre franco-ontarien de ressources en alphabétisation) (Garceau, 1998; Laflamme and Bernier, 1998) and another from the Ministry of Training, Colleges and Universities (Ontario-MTCU, 2001). Of the 17 documents, three look more specifically at the situation in Ontario and one at New Brunswick.

The IALS made it possible to raise awareness among those working in education about the importance of reading and of introducing the new concept of literacy. The results offer relevant information about the development of public policies that are better suited to the situation (Statistics Canada, 1996).

The various research studies deal with either the comparative aspects between the different OECD countries that took part in the IALS (Canada, Ireland, Germany, the Netherlands, Poland, Sweden, Switzerland and the United States), or with Canada, its provinces and territories. In the paragraphs that follow, we summarize the data according to whether they relate to: the Canadian population; Francophones compared with Anglophones; Francophones; comparisons between countries; the international adult literacy and skills survey; and policies.

It should be noted here as a reminder that individuals are identified as having poor literacy skills when they do not exceed level 2 (see Box 1 in section 2.1) in the three types of texts used to measure literacy: narrative texts, schematic texts and texts with quantitative content (Statistics Canada*, 1996b).

THE CANADIAN POPULATION
The IALS research for Canada involved 5,600 people aged 16 and over. All of the research done using these results therefore has common data:

- Many adults fall into levels 1 and 2: in Canada, 40% are at these levels, whereas 20% fall into the higher levels 4/5 (Statistics Canada, 1996);
- 40% of adults seem to be at level 3, the level considered to be the minimum required in order to function properly in societies based on the written word (Statistics Canada, 1996);
- The lower the literacy level, the lower the socioeconomic status, the higher the rate of unemployment (three times higher among individuals at level 1 compared with those at higher levels), and the greater the reliance on social assistance (Statistics Canada, 1996);
- The lower the literacy level, the more time people spend in front of the television, which becomes their main source of information (Statistics Canada, 1996);
- The lower the literacy level (levels 1 and 2), the less the individuals concerned tend to appreciate the problem with their low literacy level (Statistics Canada, 1996);
- Youth aged 16 to 25 have a higher literacy level than their elders (Willms, 1997);
- Socioeconomic status has an impact on literacy level (Statistics Canada, 1996), but it varies by province (Willms, 1997);
- Female Canadians have a higher literacy level than male Canadians, irrespective of age group, except as concerns texts with quantitative content (Willms, 1997);

- Individuals whose mother tongue is neither French nor English achieve markedly lower results than those whose mother tongue is one of the test languages (Willms, 1997).

It should be pointed out that, in Canada, according to the IALS data, the education level of parents has an impact on gender differences in terms of the reading skills of youths: women are more affected than men by the education level of their parents (Willms, 1999).

FRANCOPHONES COMPARED WITH ANGLOPHONES

The results that have just been presented are for the entire Canadian population. As regards Francophones, Statistics Canada (1996) notes that 60% of those living outside of Quebec are at literacy level 1, which sheds light on the variations in literacy according to place of residence and language of the majority. The research done by Corbeil (2000) best clarifies the differences between Anglophones and Francophones in Canada, the latter having achieved poorer results on the skill tests. Thus, on the narrative texts scale, three times more Anglophones (27%) than Francophones (9%) Canada-wide are at the highest skill level, whereas twice as many Francophones (25%) than Anglophones (13%) are at the first level. The proportions of poorly educated (level 1) Francophone adults are highest in New Brunswick (31 to 38% on the three text scales), and the gap between the two language groups is widest there. If one considers the average literacy results, the gap remains significant between the two language groups, as well as between Francophones in Quebec and those living outside of Quebec.

Corbeil (2000) uses several variables from the IALS in order to determine the factors that may explain the gaps between the two language groups. Several significant gaps between the two groups cease to exist once one controls for the effect of key factors, such as schooling, age, gender, types of occupation, daily writing and numeracy practices, and the rural or urban setting. Similarly, the disparities between Francophones from Quebec and Anglophones Canada-wide are almost totally explained by the variables from the IALS. However, the situation is different in New Brunswick and, to a lesser extent, in Ontario. For example, even when one controls for 11 significant variables in a regression equation, the gap between Francophones and Anglophones in New Brunswick is reduced by only 29%; that is to say that 71% of the gap remains unexplained. As for Francophones in Ontario, the introduction of variables reduces the gap between the two language groups by only 57%, compared with 89% in the comparison between Quebec (Francophones) and Canada (Anglophones). Thus, the fact of living in a minority situation may cause the skill levels achieved by young Francophones to erode, even if they are more educated (Corbeil, 2000).

FRANCOPHONES

Five research studies that rely on IALS data relate to Francophones. We will deal first with the research done by Wagner (2002) on Canadian Francophones, and

then the Statistics Canada research (1998) on New Brunswick and finally the three publications on French Ontario (Garceau, 1998; Laflamme and Bernier, 1998; Ontario-MTCU, 2001).

In his research work, Wagner (2002) relies not only on the IALS data, but also on the data from the 1989 Survey of Literacy Skills Used in Daily Activities (LSUDA) and those from the 1986 Southam survey. The data are consistent with those from Statistics Canada (1996) and Corbeil (2000) suggesting that reading, writing and numeracy skills are lower among Francophones than Anglophones. However, the situation in Quebec is different from the situation in the other provinces. In the other provinces, Francophones' skills are deteriorating as a result of the instrumental use of English. Anglophones have a better grasp of written communication than Francophones. Francophones read and write less, revealing that literacy skills are not well integrated into everyday life, and their reading habits are seen more at work than at home. Quebec Francophones, for their part, make less use of libraries than Anglophones, but also less than Francophones in the other provinces. The relatively poor literacy skills of French-speaking Canadians are the result of a set of factors that stem from childhood, school, everyday life and working life.

As for language shifts from French to English, Wagner (2002) highlights the strong appeal of English, particularly outside of Quebec and New Brunswick. As such, an institutional environment that promotes oral French would have a positive impact on the use of written French. The author points out that Francophones who are being anglicized assess their literacy in French positively, despite poor results on the comprehension tests; this results in a lack of motivation to become more literate in French.

New Brunswick is one of the provinces that received special attention from Statistics Canada (1998). The study involved 966 people aged 16 and over, including 495 who responded in English and 471 in French. The results are in line with Canadian literacy. Thus, Francophones scored lower than Anglophones and also than Francophones in Ontario and Quebec (Ontario-MTCU, 2001). However, the percentage of the population at level 4/5 (about 20%) is higher than the percentage in the Atlantic provinces (about 15%) and Quebec (about 10%) (Statistics Canada, 1998). Unlike in Quebec, the difference between Anglophones and Francophones does not disappear when the effects of age or education level are factored in. It should also be noted that reading activities are less widespread in New Brunswick than elsewhere in Canada (Statistics Canada, 1998).

As for Ontario, two documents (Garceau, 1998; Ontario-MTCU, 2001) describe literacy among adult Franco-Ontarians by relying on the IALS data. This survey was conducted among 1,925 individuals, including 1,044 whose mother tongue is identified as French. Of that number, 465 individuals responded to the test in French (Garceau, 1998). Garceau compares three linguistic sub-groups: Francophones who filled out both the basic questionnaire and the test in French; Francophones who completed the first in French and the test in English; and all of the Anglophones or

allophones who completed the test in English. The Anglophones have better reading skills than the Francophones, irrespective of age, education level and employment activities. Between 42.3% and 46.3% of the Anglophones who did the test in English fall into levels 1 and 2, whereas this percentage is between 54.5% and 60.8% for the Francophones who did the test in French (Garceau, 1998). Sixty percent (60%) of Francophones are therefore at levels 1 and 2, but the proportions vary depending on whether they are from Southwestern, Eastern or Northern Ontario (Ontario-MTCU, 2001). The determining factors are the individual's age and education level, the education level of the individual's parents, and being employed. Individuals with a high literacy level (level 4/5) have a great deal of occupational stability, which is not the case for individuals with poor skills who engage in few reading and writing activities in everyday life (Ontario-MTCU, 2001). In fact, under-education and illiteracy are weighing on the Franco-Ontarian community: 65% of the population in this community has not gone beyond high school (Garceau, 1998). As mentioned above, the French-speaking community in Ontario considers its reading and writing skills to be excellent or good, although, paradoxically, it acknowledges that the same skills are limiting their employability (Garceau, 1998).

The research done by Laflamme and Bernier (1998) is the third study on French Ontario. In addition to the IALS data, the research uses the one from the Enquête franco-ontarienne (EFO) and follows on from the report *Souvent en français: rapport de l'enquête sur les habitudes de lecture et d'écriture des francophones de l'Ontario*. One characteristic of Franco-Ontarians is that they alternate languages between French and English, and they listen to English-language media, although they speak French. They read books in French more often and read few newspapers. They write little, but do so in French. Reading and writing practices vary depending on age, gender and region. These data corroborate those for the Canadian French-speaking community, and the authors conclude that there is no Franco-Ontarian specificity when it comes to literacy (Laflamme and Bernier, 1998). The survey also reveals that the relationship with reading in a linguistic minority setting cannot be explained solely by the concentration of Francophones in an environment, and that exposure to electronic media (radio, television, music and computer) only has a very small impact on reading. Here again, it is important to stress the importance of culture since, as pointed out by Laflamme and Bernier (1998), one of the causes of illiteracy is the inability of the setting to instruct, rather than television per se.

COMPARISONS BETWEEN COUNTRIES
The data gathered as part of the IALS allow for comparisons between the countries involved, taking language and regional diversity into account (Statistics Canada, 1995; Tuijnman, 1997). These comparisons make it possible to confirm, on an international scale, the connections between schooling and literacy and, indirectly, the connections between literacy and income (Tuijnman, 1997). Literacy, in these works, is defined as the ability to use information to function in society (Tuijnman, 2001).

The Tuijnman report (2000) rounds out the series of three IALS reports on

Literacy Skills for the Knowledge Society. This new report adds nine (9) countries to the 12 from the first report: Chile, Denmark, Finland, Hungary, Norway, Portugal, Czech Republic, Slovenia and Tincino (for the Italian-speaking population of Switzerland). The purpose of these reports is basically to promote policy development in order to increase individuals' skill levels, especially skills for getting ahead in the 21st century (Tuijnman, 2000). The analysis reveals that although there are differences from one country to the next, none of the 21 countries achieved results that were high enough to say that they had no literacy problem in a context of globalization, technological change, changes in the labour force and the increased use of flexible work practices within organizations.

The work done by Tuijnman (2000) corroborates the known data on the various factors that have an impact on literacy levels, especially an individual's socioeconomic background, level of education and labour market experience. In 17 of the 21 countries studied, education level is the main indicator of reading skills. Age, occupational category and the ability to speak another language are also important determining factors for literacy skills.

As for age and schooling, Tuijnman (2000) establishes a correlation between these two variables. Thus, the cohorts of elderly populations display a clear delay compared with those of youths where literacy skills are concerned. However, according to this research work, investment in youth literacy education is not enough to resolve quickly the delay among adults. In other words, investment in schooling and literacy education for youths is necessary but not sufficient for staying in a competitive market in the knowledge economy. Strategies must therefore be implemented to improve the skills of older people. This conclusion is, in a way, corroborated by the longitudinal analysis of the cohorts of labour force entrants from 1960 to 1995 (Coulombe, Tremblay and Marchand, 2004). One of the interests of the latter work, and one of its main results, is that it shows that direct human capital measures based on literacy results are better than those based on the number of years of schooling. It is interesting to note here that the research by Kapsalis (2001) reveals that the connection between schooling and literacy is stronger in Canada than in Sweden. It seems to us that these works open an interesting door on the importance of literacy practices, especially since Coulombe, Tremblay and Marchand (2004) reveal that literacy has positive and significant effects on the growth of countries, on the GDP per capita and on productivity at work.

The improvement of literacy skills is therefore an important factor in the change to a knowledge economy. It enables disadvantaged workers to improve their position on the job market and contributes to increasing the skills of the labour force. Literacy also contributes to increased social cohesion and participation in political life by women, and to improved community health (Tuijnman, 2000).

Comparisons between countries, in addition to establishing general theoretical perspectives, make it possible to situate Canada, or Canada and the United States, compared with other countries. This is what Willms (1999) does for the United States,

Kapsalis (2001) for Sweden and Tuijnman (2001) for North America versus the other countries. Willms (1999) studies reading skills among youth, whereas Tuijman (2001) focuses on adults. Compared with other countries, young North American women and men aged 16 to 25 have poorer reading skills when it comes to texts with quantitative content than young Europeans: Canadians rank at the intermediate level and Americans rank almost last (Willms, 1999). In Canada, a young person whose parents have completed high school on average achieve a result that corresponds to two years of schooling less than a young European whose parents have a comparable level of education. The gap is more pronounced on the American side; it is equivalent to three or four years of formal education. It also seems that European countries are succeeding in developing strong reading skills among the least privileged youth. The results reveal that young Canadians, on average, achieve results that are equivalent to one more year than young Americans (Willms, 1999). The data reveal that there are differences between women and men: women score higher. There are also similar differences between immigrants and non-immigrants, but the difference tends to become less pronounced with time (five years). Young people from underprivileged backgrounds and minority groups also score lower than other young people. However, these data vary from State to State in the US, and practising reading reduces the inequalities.

The research done by Tuijnman (2001) reveals that Canadians and Americans achieve average results in literacy compared with other countries (despite large State and regional variations) and that American adults are average in terms of narrative text comprehension, behind adults from the Nordic countries and the Netherlands, but on par with those from Australia, Canada and Germany.

Kapsalis (2001) goes into greater detail in the analysis comparing Canada with Sweden, Sweden having the lowest incidence of reading difficulties. The author compares three groups: youth aged 16 to 25, employed adults aged 26 to 65 and unemployed adults in the same age group. The connection between schooling and literacy is more pronounced in Canada than in Sweden: 39% of Canadian adults with no post-secondary education have poor reading and writing skills, versus 18% of Swedish adults. The results seem to indicate that the Swedish school system is better able than those in Canada to equip adults with adequate reading and writing skills before the end of high school. Moreover, although the incidence of a low literacy level increases with age in both countries, this phenomenon occurs at a younger age and at a more accelerated rate in Canada. These results prompted the author to examine what differentiates the two cultures. It emerges that Swedish youth take part in more volunteer activities and use public libraries more regularly than young Canadians. Among employed adults, three types of activities are more common in Sweden than in Canada: greater participation in training activities, interest in current events and visiting public libraries. These differences are also remarkable among unemployed adults. Thus, Swedish adults engage in more writing-related activities than Canadian adults. Swedish unions, of which there are more than in Canada (90% of Swedish workers are unionized), promote literacy through their study groups. Finally, broadcasting sub-titled programs and films on television encourages reading,

especially among children from families where reading and writing skills are limited.

THE INTERNATIONAL ADULT LITERACY AND SKILLS SURVEY

The terms used in the literacy education field have changed over the years. Not so long ago, the issue of literacy education was momentous and referred to the teaching and learning of the written code, especially reading, writing and numeracy, in the mother tongue, dominant language or language of use (Legendre*, 2005). Today's works focus more on alphabetism and literacy. These two terms are synonymous (Legendre*, 2005), and authors use one or the other depending on the meaning they attribute to them. These terms refer to the ability to understand and employ printed information in daily activities, at home, at work and in the community, to achieve one's goals and to develop one's knowledge and potential (Statistics Canada*, 1996b, p. 2). The most recent [French-language] works on the international surveys opted for the term "littératie", a gallicization of the English word *literacy*.

Two publications deal with the adult literacy and skills survey (IALSS). The one by Murray, Clermont and Binkley (2005), produced by Statistics Canada and the National Center for Education Statistics in the United States, sets out the key aspects in the development of the IALSS, which was conducted in two stages in 2002 (test) and 2003 (survey). It deals with the theoretical bases, subject areas selected for assessment, assessment methods adopted and subject area inclusion criteria in the final design. Basic skills relate to the comprehension of narrative texts, schematic texts, numeracy, problem-solving, as well as knowledge and conditions of use of ICTs (Desjardins, Murray and Clermont, 2005). The purpose of this new survey is to expand the range of skills assessed by the IALS and improve the quality of the assessment methods used (Murray, Clermont and Binkley, 2005). Desjardins, Murray and Clermont (2005) state that the goal is to better understand the factors that influence the acquisition and loss of skills by adults at home and at work.

The IALSS made it possible to gather data in the following countries: Bermuda, Canada, the United States, Italy, Norway, Switzerland and the State of Nuevo León in Mexico. The target population is adults aged 16 to 65, but Canada extended data collection to include those over 65 years of age. Murray, Clermont and Binkley (2005) observe that the average literacy-related result of Canadians did not change substantially over the nine-year period between this survey and the last large-scale survey conducted in 1994 (IALS): about 58% of adults aged 16 to 65 fall into the top three literacy levels on the scale of narrative texts, which means that they are able to meet most common reading requirements. About 15% of Canadians, i.e., about one in seven Canadians, is at level 1, the lowest skill level. This represents a slight drop compared with the rate of 17% recorded in 1994. Despite this improvement, the fact remains that over 3 million Canadian aged 16 to 65 have difficulty processing written documents.

According to Desjardins, Murray and Clermont (2005), the results reveal a noticeable progression in the average results of the adults in the five lowest

percentiles, i.e., those who post the lowest literacy scores. Overall, the survey indicates a slight reduction in the disparities between the adults who post the lowest scores and those who post the highest scores in literacy.

Among the countries that took part in the 2003 survey, Canada places in about the middle of the distribution. On the narrative text scale, only two countries, namely Norway and Bermuda, outperform Canada. Adults from the United States score slightly lower than Canadians on all of the scales. Norwegians are at the top of the list on all four scales. In all of the participating countries, the study results reveal significant salary-related benefits associated with the higher skill levels, which sheds light on the importance of literacy and other skills. In Canada, the survey also indicates that young people generally outperform older Canadians. However, after controlling for the effect of the parents' education level, there seems to have been a decline in the literacy-related results of youths aged 16 to 25 between 1994 and 2003. This trend is particularly obvious among young people whose parents are under-educated (Murray, Clermont and Binkley, 2005).

These data are in line with the data gathered previously and further open up the debate over the factors that have an influence on the significant gaps in the geographic distribution of skills within each country, but also between them. The skills vary even at similar education levels. So, some countries are better able to develop skills, beyond initial schooling, that have an impact on prospects for financial success and quality of life. Some are achieving high skill levels in several subject areas, others are managing to increase the skill level of the entire population and still others have virtually instituted continuous learning for everyone (Desjardins, Murray and Clermont, 2005).

POLICIES

The IALS-related documents indicate that the different countries should use the gathered data to implement better policies with a view to increasing the level of adult literacy. They state that this will enhance the nations' international competitiveness and well-being.

The international comparisons open up avenues of action. The current practices in Sweden (Kapsalis, 2001) suggest that more attention should be paid to maintaining and improving acquired reading and writing skills among adults, promoting volunteerism among young people, increasing public library use and stimulating interest in current events.

The IALS data for Canada also reveal the particular nature of French-language literacy among Francophones in a minority setting (Corbeil, 2000; Wagner, 2002). In this sense, policies should take this aspect into account, and decision-makers should take appropriate measures to promote literacy in French (Wagner, 2002). The various social, political, cultural and educational components should be taken into consideration.

In his international comparative study on literacy in North America, Tuijnman (2001) also set out the successes and failures of the policies implemented to increase literacy. Following that analysis, he suggests ten avenues of intervention with a view to lifelong learning:

1. a culture of continuous and comprehensive learning;
2. education programs focusing on early childhood;
3. measures to improve instruction quality;
4. measures to reduce the inequality in education levels;
5. access to adult education for all citizens;
6. an environment where literacy plays an important part at work;
7. workplace literacy programs;
8. an environment where literacy plays an important part at home;
9. an environment where literacy plays an important part in the community; and
10. access to information and communications technologies (Tuijnman, 2001).

The point is to foster a culture of continuous learning by calling on the various social partners to work together and consider literacy issues from every angle.

3.1.2 Policies and Structures

The eight (8) research studies in this section deal with different aspects of literacy education policies and structures. Charest (1999) focuses on the programs stemming from the Initiatives fédérales-provinciales conjointes en matière d'alphabétisation (IFPCA); Bellavance, Careau and Pouliot (1994), Potvin (1996) and Savary (2003) deal with aspects related to cooperation in Quebec; Tremblay (1994) and Hoddinott (1998) address services and structures in Ontario, on the one hand, and in Canada, on the other hand; and finally, two research studies (Nombré, 1997; Filion, 2003) relate to the individuals served by the Regroupement des groupes populaires en alphabétisation du Québec (RGPAQ) and to the participatory approach contained in that organization's Policy Statement. Those research studies are more qualitative than the body of work related to the international surveys, but they typically combine both quantitative and qualitative data (questionnaires as well as interviews and discussion groups).

Charest (1999) does a content analysis based on extensive documentation, and seven publications associated with that research are available from the CDÉACF, each providing an analysis of the projects according to each of the IFPCA's categories. Charest's research deals with the output from the 370 projects that were completed between 1993-1994 and 1996-1997 within the framework of the IFPCA. Sponsored by the Quebec Ministère de l'Éducation (more specifically by the Direction de la formation générale des adultes), the study offers an assessment of the IFPCA program with a view to adjusting the continuing education policy being developed in

Quebec at the time (MEQ*, 1995; Inchauspé*, 1999), a policy that would finally be adopted in 2002 (Government of Quebec*, 2002). As regards the results, Charest (1999) notes that awareness-raising and recruitment activities within school boards have no effect, since the number of literacy education students is constantly decreasing; therefore, the related practices should be reviewed. The projects completed within the framework of the IFPCA are also mainly carried out within subsidized organizations and rely little on partnerships. Twenty-five percent (25%) to thirty percent (30%) of the documents would be worth distributing more widely than they are being distributed at the time of the research, in order to give the setting the advantage of best or innovative practices. Creating a databank on the projects is also suggested. The author notes that few projects involve assessment aspects. Finally, the organizations state that they are unsatisfied with the IFPCA's schedule, which would not leave enough time for project development.

The three (3) research studies on cooperation and partnership within the setting offer an overview of the situation in Estrie (Bellavance, Careau and Pouliot, 1994), in the region of Laval-Laurentides-Lanaudière (Potvin, 1996) and in Quebec (Savary, 2003). Bellavance, Careau and Pouliot (1994) first provide a description of adult trainees in Estrie: they are mainly men (2/3) under the age of 35, 60% of whom are receiving social assistance. The obstacles, as stated in topic 9, *learners and educators*, are embarrassment, shame, bad memories of school, humiliation avoidance and transportation problems. The main motivation is the search for employment, and that is also the main reason for dropping out, since 40% of adults stop taking part in literacy education along the way. As regards cooperation, the authors assert that it is difficult to achieve; it should involve government, municipal and community organizations as much as the workplace. It would no doubt be advisable to reorganize training services and develop different approaches.

The other two research studies focus more on the cooperation aspect. They are sponsored, one by the Table régionale de concertation en alphabétisation Laval-Laurentides-Lanaudière (Potvin, 1996), in Quebec, and the other (Savary, 2003) by the Table des responsables de l'éducation des adultes et de la formation professionnelle du Québec (TREAQFP). Both research studies entail interviews, although Savary (2003) also took into account the discussions that took place during a workshop held as part of a TREAQFP conference in June 2003. Potvin (1996) provides an overview of the setting's perceptions of illiteracy and cooperation, whereas Savary (2003) focuses on cooperation between school boards and other adult basic education workers. Although, for Potvin (1996), all of the respondents agree that everyone has a role to play and that they are in favour of coordination of efforts, they have very little knowledge of the disadvantages stemming from the inability to understand information that has been conveyed and of the social costs of inadequate basic education. As for cooperation, it is limited mainly to referral and posting. As such, there is work to be done before there is any real cooperation and coordination of actions in the region. It would be necessary to set up meetings between the partners, see to resource sharing, develop strategies, engage in awareness-raising activities and offer training to workers.

Savary (2003), on the other hand, analyzes the cooperation structures instituted and notes that there is partnership mainly at the local level; little documentation could be generated at the regional level. Efforts will therefore have to be made to organize regional cooperation as stipulated in the Quebec Policy. The research made it possible to identify the conditions required for successful interorganizational cooperation: developing a common and shared vision; having committed people who rally to make the project a reality; having the support of management; establishing clear goals to be achieved within quite short lead-times; joining in the action; and, finally, having sufficient funding, in particular from the IFPCA. At the end of the research, the author recommends increasing awareness-raising efforts among school boards, particularly among adult education services directors, on the issues relating to the implementation of the Government Policy on Adult Education and Continuing Education and Training. It is also suggested that existing cooperation between the tables or committees in the regions be bolstered, and that the regions that have set up a regional cooperation process as part of the activities orchestrated by the TREAQFP be encouraged to swap experiences. Several of these proposals actually support those put forward by Potvin (1996), which reveals that cooperation is coming up against certain structural obstacles, with each organization working in its own sphere, and personal obstacles, with individuals generally having little knowledge of the issue of literacy.

Both research studies on the services offered and structures set up aim to offer an overview of the situation and include recommendations for making literacy education activities accessible to the elderly members of the Franco-Ontarian community (Tremblay, 1994) or to adults requiring basic education in Canada (Hoddinott, 1998). That is why Tremblay (1994) inventories the services, associations and workers in the literacy education field (appended to the report) and provides specific data in the report itself on the characteristics of the elderly in French Ontario. It should be noted that few of these individuals admit that they are illiterate, and that leaders in the field who were questioned tend to remain silent on the subject in order to avoid offending them. The elderly want to develop their basic skills in order to be independent, especially in order to be able to vote on their own. Their needs are therefore of a more sociocultural nature, which distinguishes them from the needs of younger people, which are more centred on employment and income, as we will see in topic 2 of this report, *accessibility and retention,* and are similar to those of women.

For his part, Hoddinott (1998) does a local and general analysis of access to adult basic education (ABE) services in connection with the existing policies and practices. The local analysis involved adult learners and teachers from four establishments that are representative of all of the services in Canada. The general analysis is based on the 1989 Adult Education and Training Survey and on the Canadian portion of the 1994 IALS. This research follows on other preliminary research done in 1996 titled *Répondre à un besoin manifeste: Document de travail sur l'alphabétisation des adultes au Canada* (not included in the RÉCRAF database). This work reveals gaps, which confirms the need to review the policies and practices.

In particular, the issue is the disparity in services from region to region. This is also raised in the research done by Tremblay (1994), since the problems encountered are specifically service management and funding problems. Government authorities do not necessarily perceive literacy education as a priority, especially when it comes to French in a minority setting.

It should also be mentioned that both research studies deal with the educator aspect. Tremblay (1994) discusses the lack of literacy educator certification, whereas Hoddinott (1998) cites their poor working conditions and states that improving those conditions is a goal that must be achieved.

The final aspect addressed in this policies and structures sub-topic is that of the RGPAQ (Regroupement des groupes populaires en alphabétisation du Québec). The study by Nombré (1997) provides an overview of the 125 grassroots community literacy education groups in Quebec at the time, especially of the adults who use their services and the facilitators involved in the groups. According to that study, the adults who take part in the activities of the grassroots community groups are generally over the age of 26; they are mainly women (60% of the clientele) and immigrants (20%). The dropout rate is about 10%. As for the facilitators, they number 1,300, with 1,000 working on a volunteer basis, and 60% of them have an undergraduate university education.

The research done by Filion (2003), sponsored by the RGPAQ like the above research, has a completely different objective, i.e., to provide food for thought on adult involvement in training within the democratic structures of the RGPAQ and its member groups. In fact, it deals with the democratic space reserved for adults, and the research reveals differences in perception between the ideology developed at the RGPAQ, its implementation within the member groups and the participatory practice of the adults, especially as regards support for involvement and the distribution of information. According to the research, efforts being made by the facilitators do not seem to fully meet the needs of the participating individuals. According to the study, it would be desirable for the member groups to analyze their practices in light of the values set out in the RGPAQ Policy Statement.

3.1.3 Conceptual Approaches and Foundations

Four publications were classified in this sub-topic. One came out in 1999 (Duchesne), two in 2002 (Verrette and Vautour) and the last was pending at the time this overview was written (Legendre). Each research study deals with different issues and concerns. We present them successively.

The work by Duchesne (1999) is actually a doctoral dissertation done at the Université de Montréal under the supervision of Émile Ollivier. The purpose of this research is to develop a conceptual foundation for literacy education for adults with intellectual disabilities. It seeks to gain a better understanding of the issues being

studied and build a theoretical framework to foster the success of literacy education activities involving this clientele, because workers in this field have little training and multiple approaches are used. The proposed model aims to promote adult reading skills acquisition through overall personal development in order to facilitate integration into society.

The monograph by Verrette (2002) is a revised version of a doctoral dissertation done at the Université Laval under the supervision of Claude Galarneau. This research sets out to take a statistical measure of literacy education development in Quebec between 1660 and 1899. The author describes the transition from a Quebec society dominated by oral culture to a society where the written word prevails. The author relied on the ability of spouses to sign marriage registers as indicators of literacy. This research is information-rich and opens with unfamiliar scenes, in particular the struggle between the Church and State for control over education; the gaps between the working-class setting and the more well-off population; the predominance of access to instruction for Anglophones over Francophones and Protestants over Catholics; the superiority of literacy education for men until the middle of the 19th century. In closing, the author challenges the idea that Quebec society has fallen behind and hopes that subsequent research will fill in the many gaps in the general picture of the history of literacy education, in particular the analysis of data from Montréal and the Eastern Townships, the relationship between literacy education and industrialization, the relationship between policy and literacy education, and literacy education development through the family unit.

The work by Vautour (2002) is of a different nature. It is action-research that mobilized nearly 100 workers from various sectors of the Acadian and Francophone community in order to identify the means for developing literacy using a comprehensive and multi-sector approach. The results of the group consultations made it possible to develop ten (10) notes on literacy in connection with 10 sectors of activity (Wagner and Vautour, 2002). These notes are intended for workers in the Acadian and Francophone community in New Brunswick. They relate to the following sectors:

- Note 1: Fully literate Acadian and Francophone society;
- Note 2: Literacy and community development;
- Note 3: Literacy and political and legal framework;
- Note 4: Literacy and early childhood – families;
- Note 5: Literacy and school system;
- Note 6: Literacy and literacy education – adult education;
- Note 7: Literacy and overall health;
- Note 8: Literacy and economic development – employment;
- Note 9: Literacy and artistic and cultural development;
- Note 10: Literacy and communications – media.

The latest research on this sub-topic is in progress. Funded by the NLS, like

many research studies under this topic on adult literacy, the work done by Legendre, from the Université du Québec à Montréal, relates to the development and updating of literacy education-related vocabulary. Like Legendre has managed to do so far for education-related vocabulary (Legendre, 1999), he undertook this work in order to round out that dictionary and include literacy education-related vocabulary in it. The goal, therefore, is to circumscribe, clarify, define and enrich literacy education-related vocabulary using a comprehensive and interdisciplinary approach aimed at educators, researchers, managers and any other worker in the field. This work will facilitate communication between everyone working in literacy education, whether in intervention or research. The third edition of the *Dictionnaire actuel de l'éducation* was published in 2005.

It should therefore be noted that four of the five research studies presented as part of the sub-topic on conceptual approaches and foundations come from universities; this is actually one of the preferred places for theoretical work. It would probably be beneficial to develop further university-setting partnerships so that research goals are duly tied to community needs.

3.1.4 Summary of Topic 1: Adult Literacy

Topic 1, *adult literacy*, contains 29 publications. Of those publications, 18 centre on the 1994 IALS or the subsequent 2002 and 2003 survey (IALSS). Seventeen (17) research studies were classified in the sub-topic "data from the international surveys", which makes it the largest sub-topic. The other 12 research studies deal with different aspects relating to policies and structures (8) or with conceptual approaches and foundations (4).

The 17 research studies relating to the international surveys are of a quantitative nature with the intention of promoting policy development to improve adults' skills. Most were published by Statistics Canada. The IALS made it possible to increase public awareness of the importance of reading and of introducing the new concept of literacy that categorizes adults on the basis of different skill levels. It also enabled a comparison between Canada and other countries, in particular the United States and Sweden. The research studies included in this sub-topic deal with the literacy of Canadians nation-wide and in all regions. The data indicate that 40% of them fall into levels 1 and 2 and are therefore considered to have poor literacy skills. The research addresses the differences between Francophones and Anglophones, with the former scoring lower than the latter, especially for Francophones living in provinces other than Quebec. In this case, Statistics Canada states that 60% of adults are at literacy level 1. Some of the research clarifies the data on Francophones from Ontario and New Brunswick.

The eight (8) research studies classified in the "policies and structures" sub-topic focus on the aspects relating to cooperation in Quebec (3); projects subsidized by the Initiatives fédérales-provinciales conjointes en matière d'alphabétisation

(IFPCA) (1); services offered and structures present in Ontario (1), on the one hand, and in Canada, on the other (1); as well as the individuals involved in and practices of the Regroupement des groupes populaires en alphabétisation du Québec (RGPAQ) (2). Those research studies are more qualitative than the body of work related to the international surveys, but they typically combine both quantitative and qualitative data (questionnaires as well as interviews and discussion groups).

The four (4) publications classified in the "conceptual approaches and foundations" sub-topic come mainly from the university setting and deal with different issues and concerns: working with individuals with intellectual disabilities, the history of literacy education in Quebec, the development of information sheets in New Brunswick, and the updating of literacy education-related vocabulary.

The research studies on the topic of adult literacy offer a great deal of information on the literacy level of Canadian adults, on the aspects related to literacy education policies and structures, and on conceptual approaches. Although there is a great deal of data about individuals at literacy levels 1 and 2, the records for the research available in the RÉCRAF database seem to provide little information about the learning process of the under-educated. According to the records, there is actually little data on their learning style or on informal learning among these individuals. What about their continuing education: what path do they take? On what content?

One might also have expected this topic to contain information about current practices and the best programs; this is not the case. Research should therefore be pursued to gather further information, whether the programs are community-based or delivered in a correctional setting, and whether they are geared toward employment or focused on citizenship. There is definitely cause to study these issues in greater detail in further research.

3.1.5 List of Research Studies on Adult Literacy

Bellavance, Christine; Careau, Jean-Denis; Pouliot, René A. *Recherche-action portant sur le partenariat en matière d'alphabétisation: état de la situation de l'alphabétisation en Estrie: cueillette de données*. Alpha-Estrie (Association), [Sherbrooke, Quebec], 1994.

Charest, Diane. *Faire le point sur nos actions. Bilan des projets des Initiatives fédérales-provinciales conjointes en matière d'alphabétisation*. Quebec (Province). Ministère de l'éducation. Direction de la recherche, Québec City, Quebec, 1999.

Corbeil, Jean-Pierre. *Literacy in Canada: Disparity Between Francophones and Anglophones: A data analysis from the 1994 International Adult Literacy Survey*. Canada. Statistics Canada, [Ottawa], [2000].

Coulombe, Serge; Tremblay, Jean-François; Marchand, Sylvie. *Literacy Scores, Human Capital and Growth Across Fourteen OECD Countries*. Statistics Canada, 2004.

Desjardins, Richard; Murray, Scott; Clermont, Yvan. *Learning a Living: First Results of the Adult Literacy and Life Skills Survey*. Organisation for Economic Cooperation and Development (OECD); Statistics Canada, 2005.

Duchesne, Jacques. *L'alphabétisation des adultes présentant des incapacités intellectuelles: un schème conceptuel pour comprendre et favoriser la réussite*. Université de Montréal, [Montréal], 1999.

Filion, Esther. *La place des participantes et des participants dans les structures démocratiques des groupes membres et du RGPAQ: rapport de recherche*. Regroupement des groupes populaires en alphabétisation du Québec (RGPAQ), Montréal, Quebec, 2003.

Garceau, Marie-Luce. *Analphabétisme des adultes en Ontario français: résultats de l'Enquête internationale sur l'alphabétisation des adultes*. Centre franco-ontarien de ressources en alphabétisation (Centre FORA), Sudbury, Ontario, 1998.

Hoddinott, Susan. *"Something to Think About - Please Think About This": A Report on National Study of Access to Adult Basic Education Programs and Services in Canada*. Ottawa Board of Education, Ottawa, Ontario, 1998.

Kapsalis, Constantine. *Catching Up with the Swedes: Probing the Canada-Sweden Literacy Gap*. Canada. National Literacy Secretariat; Canada. Human Resources Development Canada, Hull, Quebec, 2001.

Laflamme, Simon; Bernier, Christiane. *Vivre dans l'alternance linguistique: médias, langue et littératie en Ontario français*. Centre franco-ontarien de ressources en alphabétisation (FORA), Sudbury, Ontario, 1998.

Legendre, Rénald. *Développement et mise à jour du vocabulaire de l'alphabétisation*. Montréal, Quebec, (Project in progress).

Murray, T. Scott; Clermont, Yvan; Binkley, Marilyn. *Measuring adult literacy and life skills: New frameworks for assessment / Editors: T. Scott Murray, Yvan Clermont, Marilyn Binkley*. Statistics Canada, 2005.

Nombré, Martin-Pierre. *Profil de l'alphabétisation populaire au Québec: résultats d'une enquête auprès des groupes d'alphabétisation populaire*. Regroupement des groupes populaires en alphabétisation du Québec (RGPAQ), Montréal, Quebec, 1997.

Ontario. Ministry of Training, Colleges and Universities. *Literacy profile of Ontario Francophone adults: Results of the International Adult Literacy Survey (IALS)*. Ontario. Ministry of Training, Colleges and Universities, Toronto, Ont., 2001.

Potvin, Jasmine. *Recherche-action portant sur le développement de l'alphabétisation par le biais de nouvelles avenues de collaboration avec les différents organismes du milieu*. Table régionale de concertation en alphabétisation Laval-Laurentides-Lanaudière, [S.l.], 1996.

Savary, Isabelle. *Projet sur la concertation des commissions scolaires et autres intervenants sur la formation de base commune et l'alphabétisation des adultes: rapport final*. Table des responsables en éducation des adultes et de la formation professionnelle des commissions scolaires du Québec (TREAQFP), 2003.

Statistics Canada. Special Surveys Division. *Le Nouveau-Brunswick en un clin d'œil = A New Brunswick snapshot*. Statistics Canada; Canada. Human Resources Development Canada, Ottawa, Ontario, 1998.

Statistics Canada; Canada. National Literacy Secretariat. _Reading the Future: A Portrait of Literacy in Canada_. Canada. Industry Canada, Ottawa, Ontario, c1996.

Statistics Canada; Organisation for Economic Cooperation and Development (OECD). _Literacy, Economy and Society: Results of the First International Adult Literacy Survey_ . Canada. Industry Canada; Organisation for Economic Cooperation and Development (OECD), Ottawa, Ontario; Paris, France, c1995.

Tremblay, Onésime. _L'analphabétisme chez les aînés franco-ontariens: rapport d'une recherche effectuée auprès des aînés franco-ontariens et de divers intervenants_. Centre franco-ontarien de ressources en alphabétisation (FORA), Sudbury, Ontario, 1994.

Tuijnman, Albert [et al.]. _Literacy skills for the knowledge society: Further results of the International Adult Literacy Survey_. Canada. Human Resources Development Canada; Organisation for Economic Cooperation and Development (OECD), [Ottawa, Ontario]; Paris, France, [1997].

Tuijnman, Albert _Benchmarking adult literacy in North America: an international comparative study_. Statistics Canada, [Ottawa], 2001.

Tuijnman, Albert _Literacy in the Information Age: Final Report of the International Adult Literacy Survey_. Canada. Industry Canada; Organisation for Economic Cooperation and Development (OECD), Ottawa; Paris, 2000.

Vautour, Charline; Wagner, Serge. _Une société acadienne et francophone du Nouveau-Brunswick pleinement alphabétisée: dix fiches-propositions visant à améliorer l'alphabétisme par secteur d'activités: résultats d'une recherche-action / [written by Serge Wagner and Charline Vautour; contribution by Claude Snow; coordination, Charline Vautour]_. Fédération d'alphabétisation du Nouveau-Brunswick (FANB), 2002.

Verrette, Michel. _Alphabétisation au Québec 1660-1900: en marche vers la modernité culturelle_. Septentrion, 2002.

Wagner, Serge. _Literacy and Literacy Training of Francophones in Canada: Results of the International Adult Literacy Survey (IALS)_. Canada. Statistics Canada, 2002.

Willms, J. Douglas. _Inequalities in literacy skills among youth in Canada and the United States_. Statistics Canada; Canada. Human Resources Development Canada, Ottawa, Ontario, 1999.

Willms, J. Douglas. _Literacy Skills of Canadian Youth_. Statistics Canada; Canada. Human Resources Development Canada, Ottawa, Ontario, 1997.

3.2 Accessibility and Retention

The topic of accessibility and retention covers 36 documents divided into 4 broad sub-topics: "obstacles to participation, withdrawal and success" (7), "study on the needs of the illiterate" (17), "literacy education program assessment" (7) and "challenges of communicating with the under-educated" (5). The documents are qualitative in nature. How illiterate individuals perceive training is addressed in the first three sub-topics. Particular attention is paid to target geographic populations in the study on the needs of the illiterate. Literacy education program assessments are motivated by the desire to improve the services offered or to better target the clientele. As regards communication challenges, the sub-topic also aims to improve the services offered by means of better information transmission.

Figure 3.2 – Distribution of research studies on accessibility and retention by year (N=36)
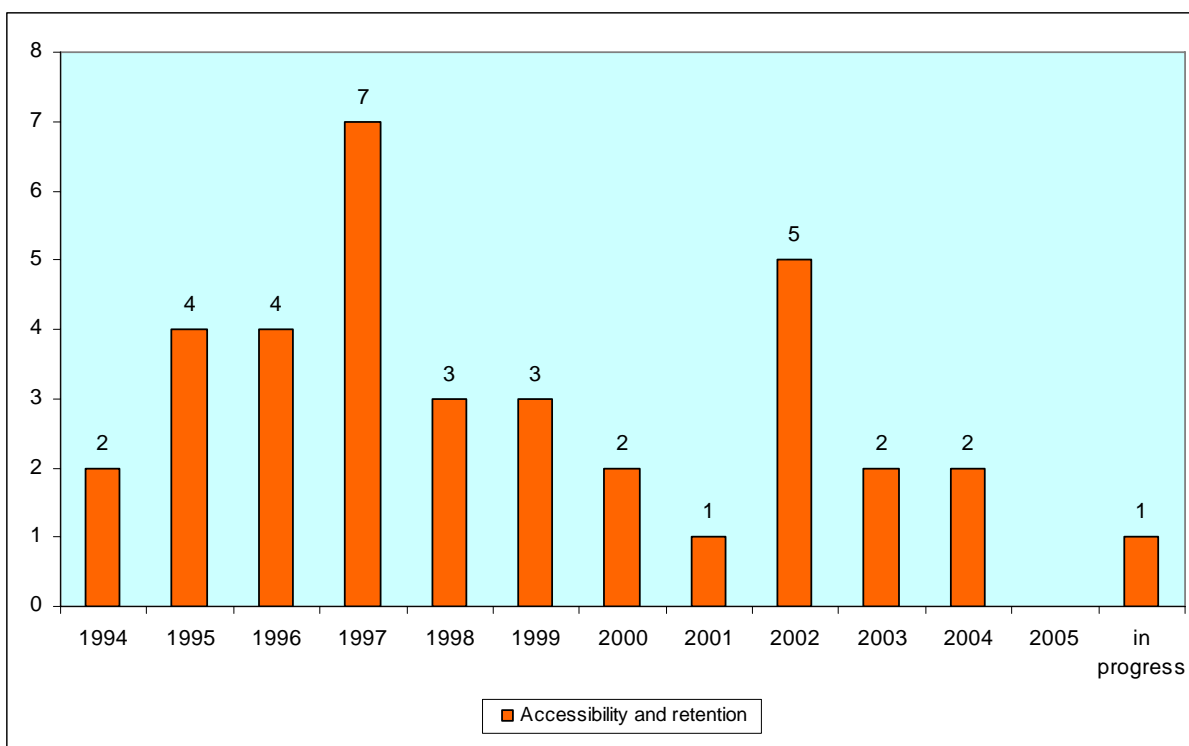
Most of the research follows a similar methodology. Interviews were conducted with learners, workers or under-educated individuals who do not attend a training centre or organization. The preferred types of interview are the focus group and the individual interview, but several studies also involved telephone and semi-directed interviews. All of the surveys were based on qualitative data and a few, particularly those that provided an overview of a specific geographic region, used quantitative data and sent questionnaires to target populations.

The quantitative studies that did not involve interviews with illiterate individuals in order to better target their needs and perceptions are not included in the *accessibility and retention* category. They are better suited to the topic *adult literacy*. Works dealing with access to employment and with people's training needs in order to access employment are also not included, since this is dealt with in topic 5, *literacy and employment*. It should also be pointed out that perceptions about the obstacles to literacy education are dealt with in this section, but that the perceptions of learners are addressed in topic 9, *learners and educators*.

3.2.1 Obstacles to Participation, Withdrawal and Success

This section deals with the obstacles to participation in training programs (4: PGF Consultants, 1997; Jacques, 1996; Lavoie *et al.*, 2004; and Roy, in progress); with the reasons for departure and withdrawal (2: Roy, 1994 and Dubé, 1996); and with the factors for succeeding in the programs (1: Ouellette, 1997). Two research studies and two theses were classified as describing the obstacles to training for illiterate adults. Interviews were conducted with workers in this setting, educators and adult students. The publication dates of these documents are 1996, 1997 and 2004; one thesis is pending. The purpose of the studies was to determine the main barriers to participation in training programs by illiterate adults. All of the studies are qualitative; the researchers conducted various interviews in order to gather data and contacted an average of over forty people.

On the whole, the studies agree on the obstacles to training. The obstacles associated with life situations are as follows: financial insecurity; employment conditions; family demands, which affect mainly women; work, which is considered to take priority; the lack of time (Lavoie, Lévesque, Aubin-Horth, Roy and Roy, 2004) and unsuitable schedules (PGF Consultants, 1997). As regards people's frame of mind, the factors cited are: their relationship with reading and writing; trying academic experiences; negative perceptions of school; being belittled as regards their intelligence and learning (Lavoie *et al.*, 2004). Finally, learners cite several institution-related factors, such as the intake process, programs that restrict financial support, the formality of the educational framework, training that is poorly suited to adults and the difficulty of getting acquired knowledge recognized.

Jacques (1996) and PGF Consultants (1997) also looked into the psychosocial factors standing in the way of training. The feeling of inferiority and the lack of self-confidence are significant barriers to literacy education. Establishing a trusting relationship between the staff and the learner is vital, as is the help of those around the learner.

The inadequacy of the information offered by the training centres is one factor that crops up in the studies: there seems to be a lack of accurate information on the activities offered, and the terminology used is considered pejorative (Jacques, 1996 and Lavoie *et al.,* 2004). PGF Consultants (1997) states that many illiterate people

feel they have the ability to read and write, and therefore they do not feel that the image of the illiterate person who is excluded from society applies to them.

Jacques (1996) highlighted four main obstacles to participation: the fear of being laughed at and the negative pressures of the setting, negative experiences at school combined with a lack of knowledge of the services offered, advertising that misses its target and the dearth of expected results following training.

The recommendations made by these studies indicate that advertising and information about training offered to illiterate adults should be improved, and adults should have an open invitation and be encouraged to actively participate during training. Lavoie *et al.* (2004) suggest avenues of research, namely: determining the profound causes underlying the lack of time cited as an obstacle to participation, conducting action-research on less formal programs and studies to assess the possibility of establishing a connection between youth and adult training.

3.2.2 Needs Study

The sub-topic on the needs study includes 17 documents and often represents a descriptive overview of the illiterate. While 10 of them present quite a static image, six (6) others are less descriptive and present data on the factors that limit access. A final document deals with how the demand is expressed (Wagner, Bélanger and Voyer, 2004).

The research studies focus on specific regions:

- In Quebec, they look at Buckingham (Comité Alpha Papineau, 1997), Charlevoix-Ouest (Gaudet, 1997), Villeray in Montréal (Simard, 1998), South Central Montréal (Boucher, 1999), Saint-Henri and Petite-Bourgogne (Poisson, 1999), the Commission scolaire des Draveurs de Gatineau (Assogba, 2002), Grand Plateau (Duval, 2002) and Soulanges en Montérégie (Soumaya, 2002), in addition to two that focus on Montréal school boards (Charest and Roy, 1994; Warnke, 1999).
- In British Columbia, they look at Nanaimo-Parksville (Besseghieur, 1995), Maillardville (Denis, Cordeau and Beaucage, 1995), Prince-George (Marquis, 1995) and Kamloops (Dion, 1996).
- In Ontario, they look at Thunder Bay (Young, 1995) as well as Beardmore, Caramat, Géraldon, Longlac and Nakina (Centre d'alphabétisation Alpha Nord-Ouest, 1998).

On the whole, although the studies were conducted in quite limited areas, the information gathered is roughly the same (factors that create obstacles, socio-economic-demographic data, etc.). Thus, the groups studied are low-income, working-class and grew up in a family that did not give priority to education. The goal of the research studies, which generally combine qualitative and quantitative aspects,

is to determine the needs of the illiterate clientele or to verify whether the services offered correspond to the demand. A single study involved street work (Poisson, 1999).

The methodology is similar for most of the research studies: telephone or individual interviews, discussion groups and the mailing of questionnaires (the latter element being typical of, but not exclusive to, the research on Francophones in an Anglophone setting). The data from the 1991 Canadian census were also used as a source of information.

Some of the research studies focused on providing a description of illiterate Francophones in an Anglophone setting (Ontario or British Columbia). In the regions studied, Francophones represent 3 to 4% of the population and are often described as being in the process of being assimilated, especially because it is difficult for them to access French-language resources. The illiterate generally engage in manual labour, are unemployed or receive social assistance and, as a result, have a low income. The sociodemographic factors remain those cited to describe the populations with low literacy levels: a difficult time at school, an under-educated family, etc. The studies conducted in British Columbia reveal a lack of access to French-language resources for the residents of the regions studied. The explicit demands of the illiterate include: information technology, reading, writing and basic mathematics. Marquis (1995) also raises a demand for professional development training or training in credit programs. They prefer to receive basic instruction in a group and at literacy education centres. The schedule and cost of the activities (Marquis, 1995) are major obstacles to participation in those activities.

The studies conducted in Quebec, on limited populations, paint a similar socioeconomic picture: poverty, education not valued within the family, no high school diploma, many social assistance recipients (Comité Alpha Papineau, 1997), heavy academic failures (Boucher, 1999). The demands are the same: training in reading and writing with a view to improving their personal lives. There are multiple and varied basic education needs; the purpose of acquiring reading and writing skills sometimes relates to the individuals' social and personal lives, and sometimes to their occupational activities (Soumaya, 2002).

Warnke (1999), for his part, provided an overview of the geographic location of Anglophones in Quebec, and one study focused on second language learning (English or French) in multi-ethnic settings (Charest and Roy, 1994).

Young (1995), while studying the Thunder Bay region, divided the participants into three separate groups: adults aged 50 and over, adults between 30 and 49, and young adults between 25 and 29. In so doing, he revealed the differences in the needs of these age groups. In the first group, the needs are great since few of the men and women have had access to basic education. In the second, the women are more educated than the men, and in the last group, there is not such a great need for literacy education since the individuals concerned have, on average, completed

eleven years of schooling.

Another study raises differences in the personal experiences of illiterate individuals on the basis of age groups, the youngest having attended school, which is not the case of their elders (Boucher, 1999). It also seems that the individuals working at organizations are not very aware of the issue of illiteracy among young people, and that they confuse it with the goal of pursuing further education. Yet young people are resistant to formal education systems (Boucher, 1999).

Gaudet (1997) focused on the perception adults aged 50 and over have of grassroots community literacy education centres. The studies often raised the fact that basic education programs are perceived as being intended exclusively for an entirely illiterate clientele.

The studies suggest continuing to develop services for the illiterate based on the established needs and increasing the accessibility of training centres. One contradiction was raised: some studies recommend forming homogeneous groups during training activities, while others suggest forming heterogeneous groups (Soumaya, 2002). The research studies on Francophones in an Anglophone setting suggest developing French-language services in the region, especially as regards basic education for adults.

3.2.3 Program Assessment

Grassroots community literacy education groups and various government agencies assessed their adult-related practices in order to ensure that their training activities were in line with the expressed needs and to improve their offerings accordingly. Seven (7) documents were published between 1996 and 2003, one per year. Of those research reports, four (4) relate to grassroots community literacy education groups (April, 1996; Saint-Pierre, 2000; Brousseau, Jobidon and Panych, 2002; and Bérubé, Boily and Perron, 2003); one, also related to the grassroots community group, but to assess the pilot project "Alphabétisation – implication sociale" conducted among Income Security recipients (Vanier and Saint-Germain, 1997); one from a school board (Poirier, 2001); one from a study by a school board, Jeunesse Emploi centre and grassroots community literacy education group (Bélisle, 1998); and, finally, one last one from the Regroupement des centres Mot à Mot (Bérubé, Boily and Perron, 2003). All of the assessments were carried out in Quebec and are of the qualitative type, with numerous interviews (individual or group interviews, face-to-face or over the telephone), and sometimes questionnaires. The goal of most of the programs assessed is to improve basic skills and promote better socio-community integration for participating individuals.

The socio-demographic data for the participants are roughly the same: very low education level, with some individuals who did not complete primary education; difficult family and social situations; past academic failure; low incomes (Vanier and

Saint-Germain, 1997, Saint-Pierre, 2000). The ages vary, although most participants seem to be between the ages of 25 and 40, and generally older rather than younger. One study is surprising for the lack of male clientele (Bérubé, Boily and Perron, 2003).

All of the research studies find that learners are satisfied with having pursued the training, in terms of both formal skills learning and personal development. The results among adults are striking: increased reading, writing, numeracy and oral expression skills (Vanier and Saint-Germain, 1997; Saint-Pierre, 2000, Brousseau, Jobidon and Panych, 2002). Social involvement also changed: new network of friends and acquaintances, new skills, greater independence and responsibility, increased self-esteem, greater self-confidence, better management of domestic life, resourcefulness (April, 1996; Bélisle, 1998; Saint-Pierre, 2000). A transfer of the learning into daily life is observed, and there are benefits on the personal, social, financial and cultural levels (Brousseau, Jobidon and Panych, 2002).

As regards the assessments done among grassroots community literacy education groups, learners often cite the human aspect. They like the presence and availability of the workers. Learners feel that school boards are more suited to the needs of young people than to those of adults; in a grassroots community setting, their learning is more concrete, the structures more flexible and the pace more suitable (April, 1996 and Bérubé, Boily and Perron, 2003).

Various recommendations are made, but they are in the same vein, namely the pursuit of projects with a view to meeting the needs of the clientele, in particular by using computers during training activities (April, 1996) or by spending more time on numeracy (April, 1996, Bérubé, Boily and Perron, 2003). Advertising for training centres should be reviewed in some cases to facilitate recruitment, particularly the recruitment of younger people.

3.2.4 Challenges of Communicating with the Under-educated

Five research studies are on language quality and the quality of communication with under-educated individuals: Bélisle (1997), Cogem (1997), Canada Information Office (CIO, 2000), Groupe Rédiger (2002) and Trudeau (2003). They involve all of the government authorities, public organizations (Bélisle, 1997), including Revenue Canada (Cogem, 1997; CIO, 2000), Quebec Ministère des Relations avec les citoyens et de l'immigration (MRCI) (Groupe Rédiger, 2002) or government productions (Trudeau, 2003). The publication dates of those studies start in 1997, but, according to Bélisle (1997), this concern over the accessibility of information dates back to 1992, when the Institut canadien de l'éducation des adultes, now known as the Institut de coopération pour l'éducation des adultes (ICÉA), sponsored an initial survey.

Of those research studies, three relate to Canada and to the aspects of

communication with under-educated individuals. The research study by Cogem (1997) is more qualitative in nature, with interviews (30) in the community and employment settings and discussion groups with educators in the community setting. The research study by the CIO (2000), for its part, combines the quantitative, with 1,003 people responding to questionnaires, and the qualitative, with interviews (46). Both research studies reveal that the under-educated (people who are aged 56 and over, retired, have fewer than 9 years of schooling, are unemployed, are at home, have a low income or are immigrants) seldom contact government authorities; they fear even that contact and are wary of it. For these individuals, government authorities are synonymous with difficulties, not to mention possible problems. The results converge to indicate that government information is hardly reaching this group of individuals, who keep informed only through television viewing, who always favour personal contact and who seek assistance as needed from family members, friends and even educators, if they are involved in literacy education activities, in order to obtain the information they need.

The research studies conducted in Quebec complement the previous two with their contribution. Groupe Rédiger (2002) analyzes authentic documents (28), meaning documents that are used to convey information, validates those results with regard to 600 other documents and couples this work with a survey of community organizations. Groupe Rédiger from the Université Laval (2002), which falls into the new field of research called "redactology", wanted to determine the communicational effectiveness of forms intended for the general public. The research team, supervised by Isabelle Clerc, found that the forms are too long, too dense, too technical and confusing. Some would even be incomprehensible to the general public. The research makes 185 recommendations that fall into 6 categories: ergonomics and usability; structure; information; the visual; editorial language and terminology; and various general aspects.

The research by Trudeau (2003), for its part, analyzes guides to writing in plain language in order to reach the general public; the issue then is writing texts that are suited to the population's various literacy levels. In her master's thesis, the author starts from the hypothesis that most of the guides place more importance on the recommendations concerning readability (visual and language aspects) than on those concerning intelligibility (informative, structural and editorial aspects). She therefore analyzed 275 recommendations contained in five Canadian guides to writing in plain language, guides suggested for writing practical texts in the public or private sectors of Canada's French-speaking community. The analysis confirms the hypothesis, which materializes in a ratio of 75% (readability) versus 25% (intelligibility). The author also raises the fact that the recommendations are not suited to the intended speakers, that is the people responsible for writing the information documents; the latter are experts on specific content and not specialists in language communication. Work therefore remains to be done as far as redactology is concerned in order to simplify practical texts intended for the general public.

The work by Bélisle (1997), which is older, is pioneering and paved the way for

this concern over the accessibility of information through documents. This research study deals with the efforts made by 26 public agencies to produce documents with a view to reaching people who have difficulty reading and writing. The author describes the various means used to make texts accessible, such as having them validated by front-line personnel or using video and television, or even providing direct support to individuals with difficulties. The obstacles to providing adequate services are budget cuts, the lack of requests from under-educated people who are too embarrassed to make a request, the difficulty of writing simply and the lack of assessment of innovations. Moreover, a key element of accessibility efforts rests on the leadership of organization managers.

3.2.5 Summary of Topic 2: Accessibility and Retention

The topic *accessibility and retention* covers 36 documents divided into 4 broad sub-topics: "obstacles to participation, withdrawal and success" (7), "study on the needs of the illiterate" (17), "literacy education program assessment" (7) and "challenges of communicating with the under-educated" (5). The studies are by and large qualitative in nature, with individual or group interviews. Some of the research used quantitative data from the IALS and Statistics Canada.

The sub-topic "withdrawal, success and obstacles to participation" is subdivided into three: "obstacles to participation in training programs", "reasons for departure and withdrawal" and "factors for succeeding in the programs". The purpose of the studies was to determine the main barriers to participation in training programs by illiterate adults. Some obstacles are related to life situations: financial insecurity; employment conditions; family demands (especially for women); work, which is considered to take priority; the lack of time; and unsuitable schedules. Other obstacles have more to do with people's frame of mind: their relationship with reading and writing; trying academic experiences; negative perceptions of school; being belittled as regards their intelligence and learning. Finally, learners cite several institution-related factors as being additional obstacles, including the intake process, programs that restrict financial support, the formality of the educational framework, training that is poorly suited to adults and the difficulty of getting acquired knowledge recognized. Many authors also raised the fact that the information is not always appropriate for interesting people with low literacy levels in enrolling at a training centre.

The research included in the "needs study" section targeted specific populations and regions. Many studies focused on the issue of language in a minority setting. The groups observed are characterized by low incomes, a working-class background and having grown up in a family that did not give priority to education. The goal of the research, which generally combines qualitative and quantitative aspects, is to determine the needs of the illiterate clientele or to verify whether the services offered correspond to the demand.

Grassroots community literacy education groups and various government organizations also assessed their adult-related practices in order to ensure that the training was in line with the expressed needs and to improve the services offered. The socio-demographic data for the participants are often the same: very low education level, difficult family and social situations; past academic failure; low incomes. All of the research studies find that learners are satisfied with having pursued the training, in terms of both formal skills learning and personal development. The results among adults are striking: increased reading, writing, numeracy and oral expression skills. Social involvement also changed: new network of friends and acquaintances, new skills, greater independence and responsibility, increased self-esteem, greater self-confidence, better management of domestic life, resourcefulness.

Finally, the sub-topic on "communication challenges" includes five (5) research studies in connection with government and public organizations. They all deal with aspects relating to the accessibility of information intended for the general public, taking individuals with low literacy levels into account. Each of the research studies shows that there is still a great deal of work to be done in order for the information to be readable and comprehensible.

Of all the topics, the one on accessibility and retention contains the most publications. It offers data that provide a better understanding of the obstacles to participation, the needs study and communication challenges. The convergence of the results reveals that these aspects have been thoroughly covered and are well documented. The aspects about which less is known, although they are addressed in the RÉCRAF index, relate to the strategies implemented to remove obstacles and encourage the pursuit of literacy education. The aspects relating to the recognition of acquired knowledge and the validation of skills have not been addressed, and our knowledge of dropouts in the community setting is underdeveloped or even undeveloped.

3.2.6 List of Research Studies on Accessibility and Retention

April, George. *Pour savoir lire entre les lignes: les groupes populaires d'alphabétisation: recherche auprès d'ex-participants de groupes populaires d'alphabétisation sur l'impact des interventions et sur les perspectives possibles*. Carrefour d'éducation populaire Pointe-Saint-Charles, Montréal, Montréal, Québec, [1996].

Assogba, Yao (dir.). *Sous-scolarisation, éducation et accès à la citoyenneté: une étude de besoins à Gatineau*. Université du Québec en Outaouais. Department of Social Work and Social Sciences; Centre Nouvel-Horizon, 2002.

Bélisle, Rachel. *Apprendre à tisser des liens*. Institut canadien d'éducation des adultes (ICÉA), Montréal, Quebec, 1998.

Bélisle, Rachel. *Efforts d'accessibilité 1996: rapport de recherche*. Institut canadien d'éducation des adultes (ICÉA), Montréal, Quebec, c1997.

Bérubé, Claudette; Boily, Madeleine; Perron, Jean-Marie. *Perspectives d'avenir après vingt ans... : recherche*. Regroupement des Centres d'alphabétisation Mot à Mot¶, 2003.

Besseghieur, Adda. *Recherche sur les besoins en éducation des adultes: Nanaimo-Parksville: rapport final*. Éducentre; Association des francophones de Nanaimo; SAIC; Canada. Canada Employment Centre, [S.l.], 1995.

Boucher, Andrée. *Perspectives... pour changer les choses. L'analphabétisme chez les jeunes du quartier Centre-Sud de Montréal: recherche-action et pistes d'intervention*. Atelier des Lettres (Association), Montréal, Quebec, 1999.

Brousseau, Hélène; Jobidon, Jacques; Panych, Paulette. *Pourquoi je m'al fa bé ti ze ? ou "Je savais écrire, mais c'était bourré de fautes": recherche sur les acquis et les effets d'une participation à des ateliers d'alphabétisation*. Ebyôn, 2002.

Canada Information Office. *Issues and Challenges in Communicating with Less Literate Canadians, Final report*. The Office, [Ottawa], 2000.

Centre d'alphabétisation Alpha Nord-Ouest. *Recherche sur les jeunes décrocheurs*. The Centre, Geraldton, Ont., 1998.

Charest, Diane; Roy, Sylvie. *L'alphabétisation en milieu pluriethnique: étude sur les services offerts dans les commissions scolaires*. Quebec (Province). Ministère de l'éducation, Québec City, Quebec, 1994.

Cogem Recherche (Firm). *Information Needs and Strategies of Canadians with Lower Literacy Skills*. Cogem Recherche (Firm), [S.l.], 1997.

Comité Alpha Papineau. *Rapport de la recherche sur la réalité 'alphabétique' des résidant(e)s du quartier 712 de Buckingham à l'été 1997, projet IFPCA 96-97*. Comité Alpha Papineau, Buckingham, Quebec, 1997.

Denis, Ginette; Cordeau, Johanne; Beaucage, Louis. *Recherche sur les besoins en alphabétisation et en éducation des adultes francophones de Maillardville, ou, Maillardville Coquitlam C.-B.*. Éducacentre; Société Maillardville-Uni, [S.l.], 1995.

Dion, Linda. *Recherche sur les besoins en alphabétisation et en éducation des adultes en français à Kamloops: rapport final*. [s.n.], [S.l.], 1996.

Dubé, Carole. *Identification des motifs de départ et d'abandon au programme d'alphabétisation: enquête effectuée auprès des adultes inscrits à des activités d'alphabétisation sur le territoire Chapais-Chibougamau de 1990 à 1995*. Commission scolaire de Chapais-Chibougamau. Service d'éducation aux adultes; Regroupement populaire de Bouche à Oreilles (Association), Chibougamau, Quebec, 1996.

Duval, Hélène. *Étude de milieu et analyse de besoins: la face cachée du Grand Plateau*. Centre de lecture et d'écriture (CLÉ Montréal), Montréal, 2002.

Gaudet, Hélène. *Recherche exploratoire en alphabétisation populaire*. Service de formation en alphabétisation de Charlevoix (Association), Baie Saint-Paul, Quebec, 1997.

Groupe Rédiger. *Rapport de recommandations: simplification de la langue administrative: les formulaires imprimés et électroniques, les fiches du Répertoire des programmes et services / prepared by Groupe Rédiger, under the supervision of Isabelle Clerc*. Université Laval, 2002.

Jacques, Robert. *Facteurs qui font obstacle aux adultes analphabètes du Centre-de-la -Mauricie à s'inscrire aux programmes d'alphabétisation*. Université du Québec à Trois-Rivières (UQTR), [Trois-Rivières, Quebec], 1996.

Lavoie, Natalie; Levesque, Jean-Yves; Aubin-Horth, Shanoussa; Roy, Lucille; Roy, Sylvie. *Obstacles à la participation des adultes peu scolarisés à des activités de formation dans un cadre d'éducation formel et non formel: rapport de recherche / by Natalie Lavoie... [et al.]*. Éditions Appropriation, Bas-Saint-Laurent/Gaspésie; Québec-Chaudière/Appalaches; Montréal; Mauricie/Bois-Francs, 2004.

Marquis, Chantal. *Recherche sur les besoins en alphabétisation et en éducation des adultes en français dans la région de Prince George en Colombie Britannique: étude du milieu et analyse de besoins: rapport final*. Cercle des canadiens français de Prince George; Éducacentre, [S.l.], 1995.

Ouellette, Monique. *Success in English Literacy Programs in Quebec School Boards*. Quebec Literacy Working Group (QLWG), [S.l.], [1997?].

PGF Consultants Inc. *Franchir le seuil: Étude des barrières à la participation aux programmes d'alphabétisation*. Regroupement des groupes francophones d'alphabétisation populaire de l'Ontario (RGFAPO), [S.l.], 1997.

Poirier, Jean. *La formation de base à la Commission scolaire René-Lévesque: satisfaction, motivation et impact chez les élèves adultes*. Commission scolaire René-Lévesque. Service de l'éducation des adultes et de la formation professionnelle, Bonaventure, Quebec, 2001.

Poisson, Claude. *Compte-rendu de la recherche-action en alphabétisation des quartiers Saint-Henri et Petite-Bourgogne dans le cadre du programme des "Initiatives fédérales-provinciales conjointes en matière d'alphabétisation" (IFPCA pour l'année 1998-1999)*. Comité d'éducation aux adultes de la Petite-Bourgogne et de Saint-Henri Inc. (CÉDA, Association), Montréal, Quebec, 1999.

Roy, Lucille. *Étude sur les obstacles à la participation des adultes peu scolarisés à des activités de formation: le point de vue des formateurs et des formatrices*. Rimouski, Quebec, (Project in progress).

Roy, Sylvie. *Les départs et les abandons en alphabétisation: résultats de la consultation*. Quebec (Province). Service d'alphabétisation, Québec City, Quebec, c1994.

Saint-Pierre, Robert. *Rapport d'évaluation [de quatre groupes populaires québécois en alphabétisation]*. [s.n.], [Montréal], 2000.

Simard, Pierre. *Portrait de situation de l'analphabétisme dans le quartier de Villeray et stratégie de recrutement: rapport final présenté à l'équipe de travail de la Jarnigoine*. Jarnigoine (Association), [S.l.], [1998].

Soumaya, Frej. *Étude des besoins en français dans Soulanges: analyse empirique dans un nouveau contexte géographique: rapport final*. La magie des mots, Coteau-du-Lac, Quebec, 2002.

Trudeau, Sonya. *Les recommandations liées à la rédaction en langue claire et simple: entre lisibilité et intelligibilité*. Sonya Trudeau¶, 2003.

Vanier, Carole; Saint-Germain, Lise. *Rapport d'évaluation du projet Alphabétisation-Implication sociale*. Centre d'organisation mauricien de services et d'éducation populaire (COMSEP, Association); Centre d'éducation populaire de Pointe-du-Lac

(Association); CLÉ (Association); Ebyôn (Association); Ludolettre (Association), [S.I.], 1997.

Wagner, Serge; Bélanger, Paul; Voyer, Brigitte...[et al.]. _L'aide à l'expression de la demande éducative en formation générale et l'accueil de cette demande dans les commissions scolaires / une idée originale de Serge Wagner, Paul Bélanger et Brigitte Voyer, avec la collab. de Jean-Yves Desjardins... [et al.]_. Centre interdisciplinaire de recherche et développement sur l'éducation permanente (CIRDEP-UQAM), 2004.

Warnke, Jan. _Summary report: English literacy recruitment in Québec: Assessment of potential clientele, regional distribution and general recruitment parameters for the English-language school boards in Quebec_. J W Comm Inc., Quebec, 1999.

Young, Hélène. _Étude de milieu et des besoins en alphabétisation des francophones de Thunder Bay_. Association des francophones du nord-ouest de l'Ontario (AFNOO), [Thunder Bay, Ont.], 1995.

3.3   Literacy, Numeracy and Basic Skills

The topic *literacy, numeracy and basic skills* focuses on reading- and writing-related behaviours, as well as training program appropriateness and assessment. It includes 12 documents, which were classified into two sub-topics: seven (7) documents in "program appropriateness and assessment" and five (5) others in "reading- and writing-related behaviours and attitudes". The objectives of the research studies seem to be to clarify reading and writing appropriation among learners and to observe the existing practices. Some documents look into established programs in order to identify the most appropriate methods.

Most of the documents come from the university setting and are qualitative in nature, except the one by Laflamme and Bernier (1996), which uses a quantitative approach. The qualitative research studies combine observations with individual interviews to verify the underlying hypotheses.

Figure 3.3 – Distribution of research studies on literacy, numeracy and basic skills by year (N=12)
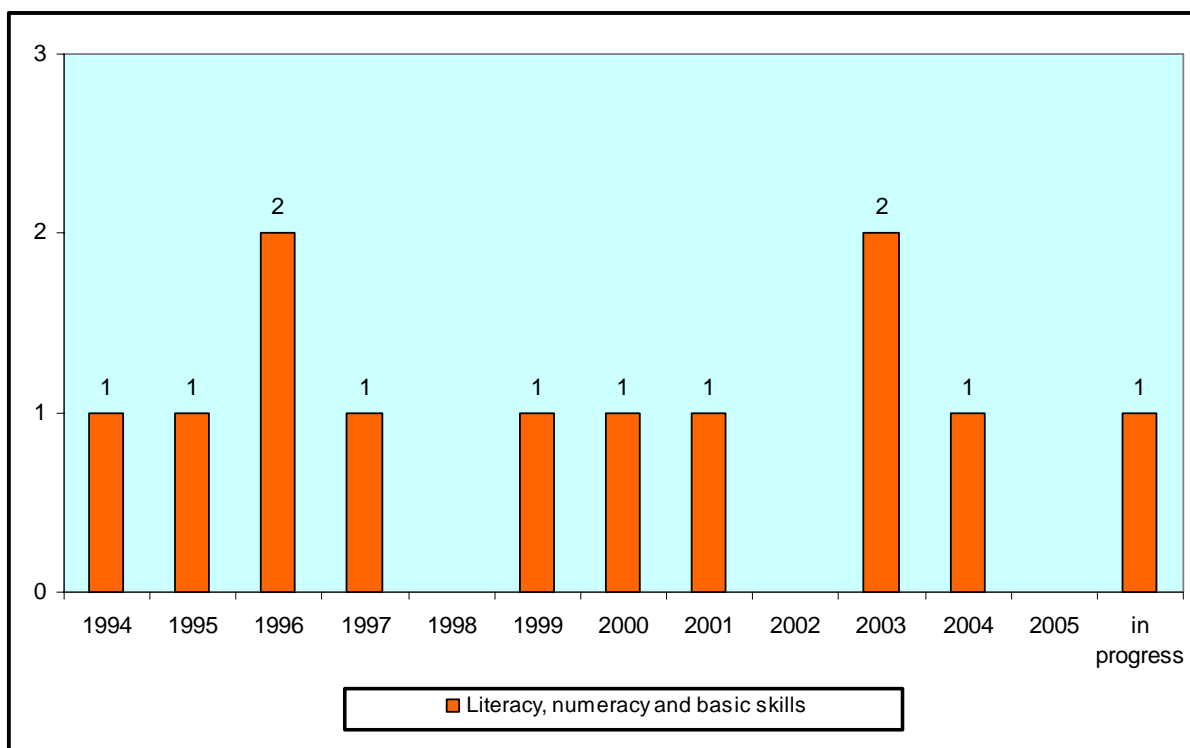
3.3.1 Appropriateness of Training and Program Assessment

Seven (7) documents are included in the sub-topic "appropriateness of training and program assessment"; almost all of them come from university research. The publication years are from 1996 to 2000. There are three (3) theses (Laurin, 1996, Sidambarompoullé, 1997 and Malenfant, in progress); one (1) research study done on an Indochinese population (Borowski, 1995); and two (2) research studies that could not be completed for lack of funds (Pelletier, 1999; Pelletier 2000). Audet, Daneau, Desmarais *et al.* (2003), for their part, set out the results of training-action-research conducted on young adults for a period of over five consecutive years. The research studies attempt to assess teaching practices used with immigrants and under-educated individuals. Some research studies set out the results of an examination of instructional tools used at training centres.

Laurin (1996) did his thesis with the Commission des écoles catholiques de Montréal and studied an instructional tool being tested on immigrants. The teaching method used corrective phonetics. The content of the training dealt with the concepts of acoustic and articulatory phonetics, as well as the strategies used to teach under-educated non-Francophone adults how to distinguish French vowels. According to the author, the use of simple and metaphorical language should help immigrants to learn French. The training enabled the teachers to better understand the phonetic interference mistakes their learners made.

The thesis done by Sidambarompoullé (1997) deals with the teaching methods used with learners from Réunion Island. Her hypothesis is that the most effective techniques are the ones that combine the social and motivational with the cognitive, by contextualizing learning and developing a tool for adapting to problems in the learners' everyday lives. In order to verify her hypothesis, she observed activities at Haitian literacy education centres and examined the training method used by the Centre portugais de référence et de promotion sociale. The analysis revealed that a contextualized approach that makes the connection between the content taught and its usefulness in everyday life enables the learner to give meaning to the act of learning and promotes a feeling of satisfaction with having acquired tools suited to the learner's everyday surroundings.

Malenfant (in progress) is studying the use of life stories in training with prisoners who have difficulty reading and writing. The purpose of this type of training is to encourage people to take charge of their future, to enable them to develop a training plan and to encourage them to acquire abstract knowledge. The training aims to develop reading and writing abilities and skills.

Two methods of teaching French as a second language were assessed among a group of Chinese, Vietnamese and Laotian subjects: the audio-visual structured and global method and the communicative approach (Borowski, 1995). Some tools are more suited to Indochinese immigrants, such as moderately structured activities and

the deductive and explicit teaching of grammar. The activities assessed most negatively are grammar-related. Supervised activities gain the favour of the Indochinese, and free activities seem to result in a lack of motivation. The results of the study did not enable one of the two methods to be designated as the most effective.

Pelletier (1999) wrote an unpublished document whose objective was to assess the appropriateness of using the philosophy program for children "Pixie: à la recherche du sens" with adult learners. The hypothesis of the research was that logical reasoning is linked with the difficulties encountered by learners with low literacy levels. The author conducted workshops for 12 weeks in order to verify her hypothesis. This research could not be completed. Pelletier (2000) took up the results of the study to conduct action-research that was not completed for lack of adequate funding. However, she was able to determine that learners do not have a command of all of the intellectual processes required to understand the written code and basic mathematics. They are unable to determine the meaning of what they are reading, which hinders learning and knowledge transfer. The purpose of this research was to establish the relevant connections between activities that encourage logical reasoning and basic literacy learning.

The training-action-research by Audet, Daneau, Desmarais *et al.* (2003), led by the grassroots community literacy education organization La Boîte à Lettres in Longueuil, was conducted from 1996 to 2001. The document sets out the autobiographical history of writing appropriation by workers and young learners aged between 16 and 25 in order to assess the organization's training practices. The authors tried to answer several questions: What resources are required in order to learn to read and write? How do people who have not integrated this basic knowledge develop? How can we support these people better? The first part of the work systematizes the practical and theoretical understanding stemming from the research regarding the reading and writing appropriation process. The paths taken by the two groups are different: young people with low literacy levels have had a negative relationship with school and learning, unlike educators. The contrasts observed in the biographical development of these two groups provide a better understanding of the many components of writing appropriation. The relationship with reading and writing appropriation is determined largely by family heritage and by the cultural distance between this family space and the academic space. The research also looks into the assessment of training activities and focuses on describing the changes to the practices of the Boîte à Lettres and the impact that this action-research had on the organization.

3.3.2 Reading- and Writing-related Behaviours and Attitudes

The reading- and writing-related behaviours and attitudes section includes five (5) documents dealing with the relationship to writing, the relationship to reading or a combination of the two. Four (4) of the documents are from university sources:

one doctoral dissertation (Bélisle, 2003), one thesis (Sylvie Roy, 1994) and two research reports from the Université de Sherbrooke (Bélisle, 2001; Hurtubise, Guérette and Rachédi, 2004). The fifth document differs from the others because of its place of publication (Ontario) and quantitative aspect (Laflamme and Bernier, 1996). The people studied come from various backgrounds, including street youth and adults facing socioeconomic difficulties (Hurtubise, Guérette and Rachédi, 2004), and 16- to 25-year-olds attending literacy education centres (Roy, 1994). All of the reports attempt to determine reading and writing habits.

Except for Laflamme and Bernier (1996), who conducted a survey, the methodologies used in the research studies are quite similar: observations over periods from 60 days to 3 years. Individual interviews were also conducted with various stakeholders, as were informal and semi-directed interviews. Bélisle (2001) took an ethnographic approach. For her doctoral dissertation, Bélisle (2003) analyzed four interrelated aspects: the physical environment of writing, the writing-related practices and interventions of stakeholders in the community setting, the facilitators' relationship with writing, and the relationship with writing of the youths taking part in the training projects.

Roy (1994) described the family, social, academic and occupational characteristics, as well as the relationships with writing, of young adults attending a training centre. The results obtained tally with those obtained in the accessibility and retention category. The learners had a difficult relationship with school and come from socioeconomically underprivileged backgrounds. They have low levels of occupational integration, read little, rarely do calculations and write even less. Youths enrolled in training want to improve their socio-occupational integration.

Hurtubise *et al.* (2004) and Bélisle (2003) hypothesized that there is a range of suitable and functional reading practices that do not necessarily correspond to the usual reading standards. The authors raised three strategies developed by workers when planning their activities with "poor readers": modifying the written media, taking a substitution approach and referring "poor readers" to "competent readers". Each of these strategies has its strengths and weaknesses. Young people's relationship with writing varies a great deal depending on the situation, and their attitudes are rarely constant (Bélisle, 2001). Facilitators have a significant impact on learners' attitude of withdrawal and rejection: practices that further nourish those relationships and encourage self-expression are the most appreciated. Workers take various positions that reflect their own relationship with writing, personal experiences and youth-related practices (Bélisle, 2001), thereby corroborating the results set out by Audet, Daneau, Desmarais *et al.* (2003) mentioned in the previous point on program assessment.

Laflamme and Bernier (1996) focused on literacy among the Franco-Ontarian population on the basis of different variables, such as age and gender. The survey took shape in a context where the proportion of illiterate people in the province's French-speaking community was declared worrying. Nearly 3,000 people were questioned in order to gather the data. The results reveal moderate interest in reading

and writing that varies according to certain characteristics. The minority language context seems to have a slight impact on reading practices. In fact, the language spoken at home has little impact on reading frequency, but it has a major impact on whether someone reads in French. Gender is a decisive variable: women read and write more frequently. Age is a less decisive variable than others, although people aged 25 to 44 read the least. Education has a clear impact on people's relationship with reading; those who are most educated will read the most outside of the school setting. Those who watch the most television are those with the lowest education level.

People on the way to becoming literate have an open and positive attitude toward reading and writing (Laflamme and Bernier, 1996). They will read more than non-learners who are at a similar literacy level. Three types of adaptation were suggested by Hurtubise, Guérette and Rachédi (2004): raising the awareness of a group of social stakeholders to the diversity of reading- and writing-related practices; the need to recognize the range of relationships to reading and writing in programs, and the importance that communities mobilize on the issue of "poor readers". One suggestion is to stop making the subject of reading and writing taboo. A person with poorer reading and writing skills should be viewed as a complex adult and not as incomplete and dependent.

3.3.3 Summary of Topic 3: Literacy, Numeracy and Basic Skills

The topic *literacy, numeracy and basic skills* includes 12 documents divided into two sub-topics: seven (7) documents were classified under "program appropriateness and assessment" and five (5) others under "reading- and writing-related behaviours and attitudes". Most of the documents come from the university setting and are qualitative, except for one that is quantitative. The researchers combined observations and individual interviews to validate their hypotheses. Unlike other topics, this one is more eclectic, while the research studies it contains targeted very specific populations.

Several studies were conducted among immigrants, particularly those of Asian extraction, and sought to identify the learning methods that were most suitable for them. Those methods include corrective phonetics, the audio-visual method and the communicative approach. No approach emerges as being more effective than another, and the hypothesis is that the most effective techniques are those that combine the social and motivational with the cognitive.

Other studies focused on the Quebec public. The works confirm that adults with low literacy levels do not have a command of all of the intellectual processes required to understand the written code and basic mathematics. The gap between family culture, personal culture and academic culture explains the low literacy of some adults. Approaches that take autobiographical aspects into account would give new meaning to reading and writing. Practices that further nourish relationships and

encourage self-expression are the most appreciated by learners, whereas, depending on the practices used, facilitators have a significant impact on participants' attitude of withdrawal and rejection.

The documents also show that people on the way to becoming literate have an open and positive attitude toward reading and writing, unlike illiterate adults who are not engaging in learning activities. They also reveal that there is a range of suitable and functional reading practices that do not necessarily correspond to the usual reading standards.

Gender is a decisive variable: women read and write more frequently. Education has a clear impact on people's relationship with reading; those who are most educated will read the most outside of the school setting.

The research catalogued under this topic thus provides a certain knowledge of training approaches and learning strategies and practices relating to reading, writing and numeracy, but a great deal of work remains to be done in order to fully understand how adults learn in a literacy education context.

None of the indexed research studies addresses the issue of maintaining acquired literacy skills. Moreover, the study of basic skills development (problem-solving, thinking skills, teamwork, etc.) is under-addressed, if it is addressed at all.

3.3.4 List of Research Studies on Literacy, Numeracy and Basic Skills

Audet, Louisette; Daneau Suzanne; Desmarais, Danielle... [et al.]. *L'appropriation de la lecture et de l'écriture: comprendre le processus et accompagner sa redynamisation: une recherche-action-formation en alphabétisation populaire*. La Boîte à Lettres de Longueuil, Longueuil, Quebec, 2002.

Bélisle, Rachel. *Des rapports pluriels à l'écrit: rapport de recherche aux partenaires sur la culture de l'écrit d'organismes communautaires d'insertion sociale et professionnelle qui proposent des projets de formation à des jeunes adultes non diplômés*. Université de Sherbrooke, Sherbrooke, Quebec, 2001.

Bélisle, Rachel. *Pluralité du rapport à l'écrit d'acteurs oeuvrant en milieux communautaires auprès de jeunes adultes peu scolarisés*. Rachel Bélisle, Sherbrooke, Quebec, 2003.

Borowski, Élyane. *Évaluation de deux méthodes d'enseignement du français langue seconde auprès d'un public indochinois: rapport de recherche*. Service d'interprète et d'aide aux réfugiés indochinois (SIARI), Montréal, Quebec, 1995.

Hurtubise, Roch... [et al.]. *Rendre lisible l'invisible: pratiques de lecture des jeunes et des adultes en milieu défavorisé et représentations véhiculées par divers organismes*. Université de Sherbrooke, Sherbrooke, Quebec, 2004.

Laflamme, Simon; Bernier, Christiane. *Souvent... en français: rapport de l'enquête sur les habitudes de lecture et d'écriture des francophones de l'Ontario*. Centre franco-ontarien de ressources en alphabétisation (FORA); Regroupement des groupes francophones d'alphabétisation populaire de l'Ontario (RGFAPO), Sudbury, Ontario, 1996.

Laurin, Robert. *Développement d'un dispositif de formation continue pluridimensionnel destiné à des enseignantes en alphabétisation*. Université de Montréal, Montréal, Quebec, 1996.

Malenfant, Maryse. *Récit de vie et alphabétisation en milieu carcéral*. Rimouski, Quebec, (Project in progress).

Pelletier, Lise. *Poursuite de recherche sur le raisonnement logique en alphabétisation*. Groupe en alphabétisation de Montmagny-Nord (GAMN), Montmagny, Quebec, 2000.

Pelletier, Lise. *Raisonnement logique en alphabétisation*. Groupe en alphabétisation de Montmagny-Nord (GAMN, Association), Montmagny, Quebec, 1999.

Roy, Sylvie. *Formation, rapport à la langue écrite et caractéristiques des filles et des garçons de 16 à 25 ans inscrits à des activités d'alphabétisation depuis au moins un an*. Université du Québec à Montréal (UQAM), Montréal, Quebec, 1994.

Sidambarompoullé, Dolize. *Un modèle d'intervention en alphabétisation*. Université de Sherbrooke, Sherbrooke, Quebec, 1997.

3.4   Literacy Among Aboriginal Peoples

The French-language documents do not cover the topic of literacy among Aboriginal peoples very much. The RÉCRAF database actually contains only one document on this subject, and it is something of an exception in that it contains the proceedings of the symposium held on May 3 and 4, 2002, at the Ontario Institute for Studies in Education (OISE).

The uniqueness of the document by Antone, McRae and Provost (2003) gives it importance. The different round table discussions mentioned therein involved eighty practitioners and researchers, and focused on various original approaches to literacy education for Aboriginal peoples. The document mentions the importance of developing a holistic approach that integrates learning into a complete cycle relating to every aspect of life. In that sense, the authors stress that [translation] "nourishing the spirit, heart, mind and body contributes to a balanced life and [that], subsequently, this state of being positively affects the development of knowledge acquisition and communication methods."

According to Antone, McRae and Provost (2003), the participants in the symposium pointed out, on the one hand, that the guidance documents from the Ontario Ministry of Training, Colleges and Universities are obsolete and, on the other hand, that practitioners, whose job descriptions are not suited to the holistic approach of their teachings, are burnt out.

3.4.1 Summary of Topic 4: Literacy among Aboriginal Peoples

The topic on literacy among Aboriginal peoples includes only one record. This in itself shows the lack of research data on the topic in French. The related document is also unique in that it consists of the proceedings of a symposium setting out the exchanges at various round table discussions. It provides minutes of round table discussions on literacy education practices and the specific characteristics of literacy education in the Aboriginal community. It puts forward the need for a holistic approach in relation to Amerindian culture.

3.4.2 List of Research Studies on Literacy among Aboriginal Peoples

Antone, Eileen M.; McRae, Heather; Provost-Turchetti, Lois. _Literacy and Aboriginal Peoples: Best Practices, Native Literacy and Learning: Symposium: Summaries of Presentations: The Ontario Institute for Studies in Education, University of Toronto, Toronto, Ontario, Canada, May 3 and 4, 2002 / [editors: Eileen M. Antone, Heather McRae and Lois Provost-Turchetti]_. University of Toronto. Ontario Institute for Studies in Education, Toronto, Ontario, [2003?].

3.5 Literacy and Employment

The topic *literacy and employment* contains all of the documents dealing with literacy education and work. The 29 documents in this section are divided into five sub-topics: "basic skills and on-the-job basic skills training" (7), "on-the-job training issues" (3), "impact of literacy education on the employability and income of the under-educated" (6), "worker training needs and obstacles" (7) and "corporate training and integration program assessment" (6). These studies, which vary greatly in terms of their topic and objectives, deal with employment and the workplace. The presence of this common denominator was the determining factor for classifying a reference record under this topic.

Figure 3.5 – Distribution of research studies on literacy and employment by year (N=29)
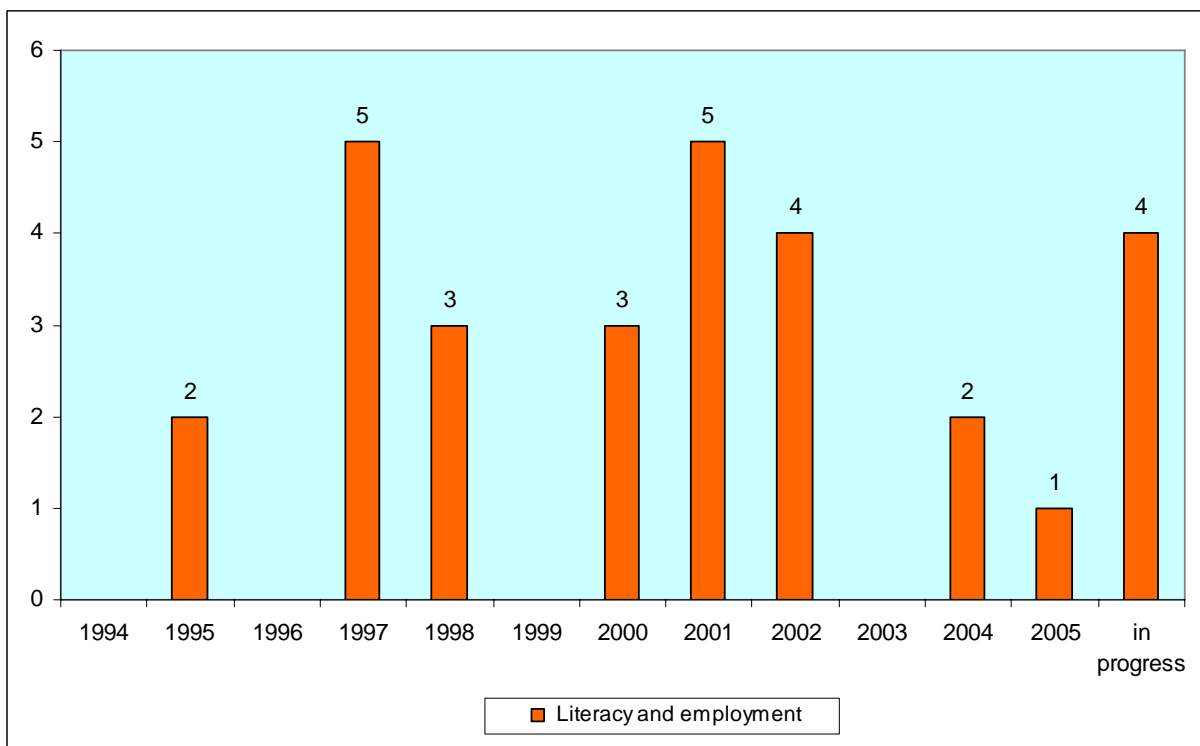
The research studies are quantitative and/or qualitative. The IALS was used as a basis for the research studies of a statistical nature. The data collection methods for the other research studies are relatively similar: various forms of interviews were used.

3.5.1 Basic Skills and On-the-job Basic Skills Training

The seven (7) documents in this section make a connection between literacy education and employment. Bloom, Burrows, Lafleur and Squires (1997) as well as Long (1997) focused on the impact of improved reading skills on employee performance and on their financial and occupational success. The purpose of the research conducted by Poirier and Plourde (2001), on behalf of the Kamouraska-Rivière-du-Loup school board, was to identify the problems adults with low literacy levels experience when job hunting. Tardif (2004), as part of a thesis, explores the connection between literacy and employment, in cooperation with the Centre d'Organisation Mauricien de Services d'Éducation Populaire (COMSEP). Two documents (Krahn and Lowe, 1998; Boothby, 2002) focus on the use of reading at work and are mainly quantitative. A final document (Groupe de travail sur la formation de base des travailleurs, comité service aux entreprises de la TREAQFP, Arbour, Colas, Dumais, Julien, Letendre and Roy, 2005) provides a frame of reference for school boards that want to offer corporate basic skills development programs.

The research methodologies vary. Both quantitative and qualitative, some of them used data from the IALS and conducted surveys of businesses. Questionnaires were distributed and compiled. A few telephone and individual interviews, as well as discussion groups, made it possible to gather more qualitative data.

According to Boothby (2002), there is a direct correlation between occupational assignment and literacy skills. A significant minority of workers do not perform tasks that require reading on a regular basis. Krahn and Lowe (1997) observe that 75% of employees have jobs that are in line with their reading skills, but that this is not the case for the last quarter. Many workers have reading skills in excess of what they require for their jobs, while 15% do not have the level required to perform their duties satisfactorily. Women and young workers are more likely to have reading skills in excess of what is required at work. The age difference is pronounced: 33% of youths aged 16 to 24 have excess skills while 20% of older people do not have the minimum skills required for their jobs.

Three themes were identified for workers with low literacy levels: knowledge recognition; information technology and the Internet; and working conditions (Poirier and Plourde, 2001). Tardif (2004) raised several causes that make employment integration difficult: extreme poverty in childhood, literacy level, stigmatization, lack of social connections, lack of family resources, burden of housework, job market where pressure and productivity exclude individuals grappling with social disadvantages.

The advent of information technology in the workplace is cited as a reason for developing employees' basic skills (Long, 1997). Companies that have offered a literacy education program to their personnel state that performance and commitment have improved, as have morale and labour relations (Bloom et al., 1997 and Long, 1997). Employees have a better appreciation of the company's goals and of the impact its actions have on them. Improved reading and writing skills result in the chance to earn a higher income, increases the likelihood of getting a full-time job and

of having opportunities to pursue continuing education activities (Bloom *et al.*, 1997). Moreover, opportunities for advancement go hand in hand with literacy education (Long, 1997).

It emerges from these studies that corporate basic skills training programs are a worthwhile investment and that it is necessary to improve reading skills in the workplace. Government authorities should adopt employment policies that facilitate the acquisition and improvement of employees' reading skills.

3.5.2 On-the-job Training Issues

Three (3) studies deal with on-the-job training. The study by Kapsalis, published in 1997, is quantitative and relies on the data from the IALS to compare training in seven countries. Internationally, the individuals who most benefit from corporate training activities are managers and professionals. Fewer activities are offered to individuals aged 45 and over, and small companies tend to offer less training than large ones. Training efforts in Canada are average compared with other countries.

Essential skills training contexts are strongly tied to differences in the perceptions or visions the various stakeholders on the sectoral labour force development committees in Quebec have of what they should be. As part of a project in progress, Ouellet is also endeavouring to determine the perceptions of essential skills training held by sectoral committee directors, union representatives and human resources managers; identify the training contexts; analyze the perceptions between the training programs; and pinpoint awareness-raising methods.

Another project Ouellet is working on focuses on continuing education for under-educated workers who have already completed basic education. It has actually been established that the most educated individuals take part in training activities more than less educated individuals, which highlights the exclusion of the latter. The purpose of the project is to fill a void that seems to exist in literacy education research, namely how to follow up on basic skills training activities in terms of continuing education. Semi-directed interviews are planned in order to gather data, which will then be processed and analyzed.

3.5.3 Impact of Literacy Education on the Employability and Income of the Under-educated

The sub-topic on the impact of literacy education on the employability and income of the under-educated includes the documents dealing with the connection between literacy level and income (Shalla and Schellenberg, 1998; Osberg, 2000; Green and Riddell, 2001; Ferrer, Green and Riddell, 2004) and between literacy and employability (Kapsalis, 1998). The research studies are quantitative and draw

inspiration from the IALS and other government data. The purpose of all of the studies was to examine the relationship between work and employment among the under-educated.

The results tally: there is a clear connection between an individual's literacy education level and socioeconomic conditions. An individual's reading skills have an impact on his or her position in terms of participation in the job market, remuneration and the risk of becoming economically disadvantaged (Shalla and Schellenberg, 1998). A less literate individual is at greater risk of being unemployed and of having a low income, whereas the opposite is true for a highly educated individual. Education seems to have a far greater impact on literacy than occupational experience (Green and Riddell, 2001). Individuals living in lower income households engage in activities that may improve their reading skills less frequently than people who are well off (Shalla and Schellendberg, 1998). By and large, social assistance recipients are less educated and have poorer reading skills than non-recipients (Kapsalis, 1998).

Osberg (2000) notes that literacy level has a different impact on men's and women's earnings. Among women, the overall rate of economic return from education is higher, but it is less affected by reading skill levels. Among men, a significant proportion of the economic return from education corresponds to the economic return from literacy. It seems that, for immigrants, reading skills may play a role in the ease with which they adapt to the job market in the host country (Green and Riddell, 2001). The experience immigrants gain in the workplace also has a positive effect on their employability (Ferrer, Green and Riddell, 2004).

One study is slightly different from the others in this sub-topic: Labrie, Bélanger, Heller, Kanouté, Erfurt, Savoie, Mellish, Budach, Lozon, Roy and Lamoureux (2000). The authors deal with the use of bilingualism by Franco-Ontarians to access jobs in emerging economic sectors. Contact with customers is increasing in the service economy, and communication skills, especially oral communication skills, are becoming important. For under-educated individuals, language skills represent one factor among a complex host of difficulties.

Various avenues of research are suggested at the end of the studies. Osberg (2000) proposes continuing to study the impact of education on men and women, since there seems to be a separate effect for both genders. Kapsalis (1998) advises studying the way in which work can contribute to the literacy level of social assistance recipients.

3.5.4 Worker Training Needs and Obstacles

Under-educated employees have various needs and face various obstacles when it comes to basic and continuing education. This section includes seven (7) documents divided into two subjects. The first, consisting of five (5) studies, focuses on workers' training needs (Porte Ouverte Inc, 1997; Huot *et al.*, 2001; Ungureanu,

2001; Labrie, Bélanger and Heller, 2002; and Steel and Thorn, 2002); and the second, containing two (2) documents, raises the obstacles to training (Duplain and Bisson, 1995, and Bérard, 1997). The objectives of most of the research studies were to determine workers' basic education needs and to raise their awareness of the importance of training. The purpose of one of the studies was to determine employees' reading skill level in order to establish the training needs of a company that was introducing new technologies (Porte Ouverte Inc, 1997). The studies focused on specific groups of workers: employees from the city of Vanier (Bérard, 1997), Sport Maska plant (Porte Ouverte Inc, 1997), companies located in Pointe-aux-Trembles (Huot et al., 2001), women's clothing industry in Quebec (Ungureanu, 2001) and the Communications, Energy & Paperworkers Union (CEP) (Steel and Thorn, 2002).

The data from all of these research studies are based on individual meetings with workers, company representatives and management members from the company or sector under study. The methodological tools also included group interviews. A few studies relied on quantitative data to define the population studied.

The researchers focused on workplaces that employ a generally under-educated labour force and where the duties do not require much in the way of reading or writing activities. The perception of the ability to read is very utilitarian among both workers and employers: the levels of reading and writing deemed appropriate are those required to do the work (Huot, Guérard, Ratthé Chartier, Ferland Lalancette, Bournival, Leblanc, 2001). Older workers do not see the need for training efforts, much like those who are employed in fields that require little reading and writing. Workers with gaps in their French-language reading and writing skills do, however, by and large signal the desire to improve their abilities (Duplain and Bisson, 1995, and Ungureanu, 2001). The CEP study, conducted on its members, indicates that 33% of the individuals surveyed feel the need to improve their reading and writing skills, and that a similar proportion seems to want to improve its mathematics skills in order to be able to fulfill its duties. Schedule and childcare service flexibility is nevertheless required in order for women to take part in training activities (Bérard, 1997). Training workers during working hours was also suggested (Duplain and Bisson, 1995). Information technology training is also becoming increasingly necessary in the current job market.

Labrie, Bélanger and Heller (2002) did research for the Centre de recherches en éducation franco-ontarienne (CREFO) and attempted to determine the clientele's French-language literacy education needs in connection with the Francophone and bilingual job market. A large proportion of Francophones in the regions studied (Niagara Peninsula, Simcoe-South and Chatham-Kent) does not have a high school diploma. Jobs are also being transferred from the heavy industry sector to the service, tourism and new information technologies sectors, sectors which require better oral and written communication skills in both French and English. The clientele attending the training centres is very diverse in terms of education level. Companies' needs for bilingual employees are, however, poorly defined and do not correspond to

actual practice.

Illiterate people may work for a number of years without anyone detecting their reading and writing difficulties (Bérard, 1997) because they hide them so well. Personal obstacles stand in the way of on-the-job training activity development: fear of being fired, of being laughed at and of compromising advancement opportunities. Duplain and Bisson (1995) also cite the following as obstacles: embarrassment, pride, lack of self-confidence, schedule conflicts, lack of interest and mistrust. The union representatives commented that individuals with a low basic knowledge level tended to turn down promotions and to be passive (Bérard, 1997). The lack of basic education excludes under-educated workers because they do not have the knowledge required in order to be eligible for possible promotions.

3.5.5 Corporate Training and Integration Program Assessment

Training program assessment is divided into three classes. The first includes the assessment of existing programs, with a view to new employment-related requirements. One document deals with this. Therrien (2001) carried out an assessment directed by the Commission scolaire des Chênes in order to adjust the services offered to learner demands and to recruit more workers. The second class includes three (3) documents and assesses experimental programs to facilitate access to employment. Thus, Lehouillier (1995) studies the "Alpha-insertion professionnelle" project, offered to young adults aged 16 to 25, as part of a school-work partnership; Lurette (2000) reports on the one-stop service model in the Hawkesbury region; and Raymond (2002), together with the grassroots community literacy education group Atout-Lire, assesses an alternative job market integration method. The organizations set up the various projects in order to facilitate employment integration for workers with low literacy levels. The third class includes two assessments on employment integration for those with low literacy levels offered by the Centre d'Organisation Mauricien de Services d'Éducation Populaire (COMSEP); these research studies are in progress (Tardif; Tardif and Saint-Germain). The research goals and methodology used are set out in these documents.

By and large, the researchers used individual or group interviews in order to gather the opinions of the various stakeholders involved in the projects. One research study gathered its data through a questionnaire. There was also one action-research study and one exploratory research study.

The individuals encountered or questioned state that they are very satisfied with the training and projects offered; they want more varied learning activities; and those who had not achieved their goals at the end of training cite work-related difficulties (Therrien, 1997). The school-work partnership project was also well received, despite a lack of communication between the partners. The involvement of illiterate individuals in the workshops provided concrete pretexts for learning and developing reading, writing and numeracy skills (Raymond, 2002). The projects

offered should be based on the learners' interests.

Thus, the various on-the-job training program assessments are generally positive. Adjustments or improvements would be appreciated, especially to further consider the needs and interests of the adults in training.

3.5.6 Summary of Topic 5: Literacy and Employment

The topic *literacy and employment* includes 29 documents divided into five categories: "basic skills and on-the-job basic skills training" (7), "on-the-job training issues" (3), "impact of literacy education on the employability and income of the under-educated" (6), "worker training needs and obstacles" (7) and "corporate training and integration program assessment" (6). Highly varied in their themes and objectives, the element connecting these studies is the notion of employment and the workplace. The research studies are quantitative and/or qualitative. The IALS was used as a basis for the research studies of a more statistical nature.

There is a direct correlation between occupational assignment and literacy skills: there is a clear connection between an individual's literacy education level and socioeconomic conditions. An individual's reading skills have an impact on his or her position in terms of participation in the job market, remuneration and the risk of becoming economically disadvantaged. A less literate individual is at greater risk of being unemployed and of having a low income, whereas the opposite is true for a highly educated individual. It seems that, for immigrants, reading skills may play a role in the ease with which they adapt to the job market in the host country.

The perception of the ability to read is very utilitarian among both workers and employers: the levels of reading and writing deemed appropriate are those required to do the work. Older workers do not see the need for training efforts, much like those who are employed in fields that require little reading and writing. Illiterate people may work for a number of years without anyone detecting their reading and writing difficulties because they hide them so well. Personal obstacles stand in the way of on-the-job training activity development: fear of being fired, of being laughed at and of compromising advancement opportunities.

Internationally, the individuals who most benefit from corporate training activities are managers and professionals. Fewer activities are offered to individuals aged 45 and over, and small companies tend to offer less training than large ones. Training efforts in Canada are average compared with other countries. The advent of information technology in the workplace is cited as a reason for developing employees' basic skills. Companies that have offered a literacy education program to their employees state that performance and commitment has improved, as have morale and labour relations.

The topic of literacy and employment is one of the topics with a large number

of research studies in the RÉCRAF database. After analyzing the research records on this topic, there is no choice but to note that the data from the RÉCRAF provide little information on effective practices for training the under-educated; the nature of the on-the-job training programs; training-related job market requirements; and formal or informal places of learning.

3.5.7 List of Research Studies on Literacy and Employment

Bérard, Marie-Hélène. _Les femmes et la formation de base: pour lutter contre l'exclusion sociale_. Alphabeille Vanier (Association), Vanier, Quebec, 1997.

Bloom, Michael ... [et al.]. _The Economic Benefits of Improving Literacy Skills in the Workplace_. Conference Board of Canada, Ottawa, Ontario, 1997.

Boothby, Daniel W. _Literacy Skills, Occupational Assignment and the Returns to Over- and Under-education_. Statistics Canada, [Ottawa], 2002.

Duplain, Lise; Bisson, Johanne. _Formation de base en milieu de travail: rapport final de la recherche-action: étude du milieu au Port de Montréal: syndicat des débardeurs (SCFP/section locale 375)_. Centre DÉBAT (Association), Montréal, Quebec, [1995].

Ferrer, Anna; Green, David A.; Riddell, W. Craig. _The Effect of Literacy on Immigrant Earnings_. Statistics Canada, 2004.

Green, David A.; Riddell, W. Graig. _International Adult Literacy Survey: Literacy, Numeracy and Labour Market Outcomes in Canada_. Statistics Canada; Canada. Human Resources Development Canada, Ottawa, 2001.

Groupe de travail sur la formation de base des travailleurs. Comité service aux entreprises de la TRÉAQFP; Arbour, Yanik; Colas, Ginette; Dumais, Mario; Julien, Jean-Denis; Letendre, Édith; Roy, Lisette. _Développement des compétences de base en milieu de travail: cadre de référence à l'intention des commissions scolaires / [document prepared by the Groupe de travail sur la formation de base des travailleurs, Comité service aux entreprises de la TRÉAQFP]_. Table des responsables de l'éducation des adultes et de la formation professionnelle des commissions scolaires du Québec (TRÉAQFP), 2005.

Huot, François ... [et al.]. _'... l'alphabétisation qu'est-ce ça donne...?:une incursion dans le monde des entreprises_. [Un Mondalire (Association)], [S.I.], [2001].

Kapsalis, Constantine. _Employee training: An international perspective_. Statistics Canada; Canada. Human Resources Development Canada, Ottawa, Ontario, 1997.

Kapsalis, Constantine. _The connection between literacy and work: Implications for social assistance recipients_. Canada. Human Resources Development Canada, Hull, Quebec, 1998.

Krahn, Harvey; Lowe, Graham S. _Literacy Utilization in Canadian Workplaces_. Statistics Canada; Canada. Human Resources Development Canada, Ottawa, Ontario, 1998.

Labrie, Normand ... [et al.]. _Alphabétisation et bilinguisme dans la nouvelle économie: études de cas ethnographiques. Rapport final de productivité_. Centre de recherches en éducation franco-ontarienne (CREFO), Toronto, 2000.

Labrie, Normand; Bélanger, Nathalie; Heller, Monica. *Alphabétisation: pratiques et normes relatives à l'emploi et à la formation des apprenant(e)s francophones (Centre-Sud-Ouest de l'Ontario): rapport final*. Centre de recherches en éducation franco-ontarienne (CREFO), 2002.

Lehouillier, Louise. *Appréciation par des enseignantes et des représentants du monde du travail d'une expérimentation de pratiques éducatives partenariales en alphabétisation*. Université de Sherbrooke, Sherbrooke, 1995.

Long, Ellen. *The Impact of Basic Skills Programs on Canadian Workplaces: Results of a Study for ABC CANADA Literacy Foundation*. ABC Canada, [Don Mills], 1997.

Lurette, Donald. *Projet perfectionnement en milieu de travail: rapport de recherche-action: expérience de guichet unique pour la formation en entreprises à Hawkesbury*. Centre d'apprentissage et de perfectionnement (CAP), Hawkesbury, Ont., 2000.

Osberg, Lars. *Schooling, Literacy and Individual Earnings*. Statistics Canada, Ottawa, 2000.

Ouellet, Chantal. *Contextes et représentations de la formation aux compétences essentielles au Québec selon les comités sectoriels de formation de la main-d'œuvre.* (Project in progress).

Ouellet, Chantal. *Continuous training practices and occupational representation of workers with little schooling in the manufacturing sector who have taken basic skills training*. (Project in progress).

Poirier, Georges; Plourde, Michèle. *Recherche-action en formation commune de base des adultes: le rôle de travailleur: démarche de validation*. Commission scolaire Kamouraska-Rivière-du-Loup, [S.l.], 2001.

Porte ouverte Inc. *Profil des besoins de formation de base: Usine Sport Maska, Saint-Jean-sur-Richelieu*. Porte ouverte Inc. (Association), Saint-Jean-sur-Richelieu, Quebec, 1997.

Raymond, Émilie. *L'affirmation professionnelle et économique des personnes analphabètes: pour une alternative au marché traditionnel de l'emploi*. Atout-Lire, [Quebec], 2002.

Shalla, Vivian; Schellenberg, Grant. *The Value of Words: Literacy and Economic Security in Canada*. Statistics Canada; Canada. Human Resources Development Canada, Ottawa, Ontario, 1998.

Steel, Nancy; Thorn, Ian. *Literacy learning, needs assessment, final report and findings / [report prepared by Nancy Steel... in cooperation with Ian Thorn]*. Communications, Energy and Paperworkers Union of Canada, [2002].

Tardif, Marie-Josée. *L'évaluation des pratiques sociales de la formation préparatoire à l'emploi de COMSEP-EMPLOI*. (Project in progress).

Tardif, Sylvie. *Les personnes analphabètes et l'emploi, utopie ou réalité? / mémoire présenté comme exigence partielle de la maîtrise en intervention sociale par Sylvie Tardif*. Université du Québec à Montréal, Trois-Rivières, Quebec, 2004.

Tardif, Sylvie; Saint-Germain, Lise. *L'entreprise de solidarité: le développement d'un nouveau concept en économie sociale*. Trois-Rivières, Quebec, (Project in progress).

Therrien, Claude. *Les compétences de base en français et en mathématiques: sondage auprès des étudiants travailleurs*. Commission scolaire des Chênes, [S.l.], 2001.

Ungureanu, Adina. *Basic skills and occupational training: inquiry into the skills, needs and expectations of workers in the apparel sector of the unionized Quebec labor force*. Union of Needletrades, Industrial and Textile Employees (SVTI/UNITE). Conseil conjoint québécois, [S.l.], 2001.

3.6 Literacy and Health

In recent years, the media have dealt with the health field on a regular basis. It is a topical subject and, with the aging population, should remain a central concern of the media and individuals. This section offers a summary of the nine (9) documents that establish a connection between literacy and health.

Figure 3.6 – Distribution of research studies on literacy and health by year (N=9)
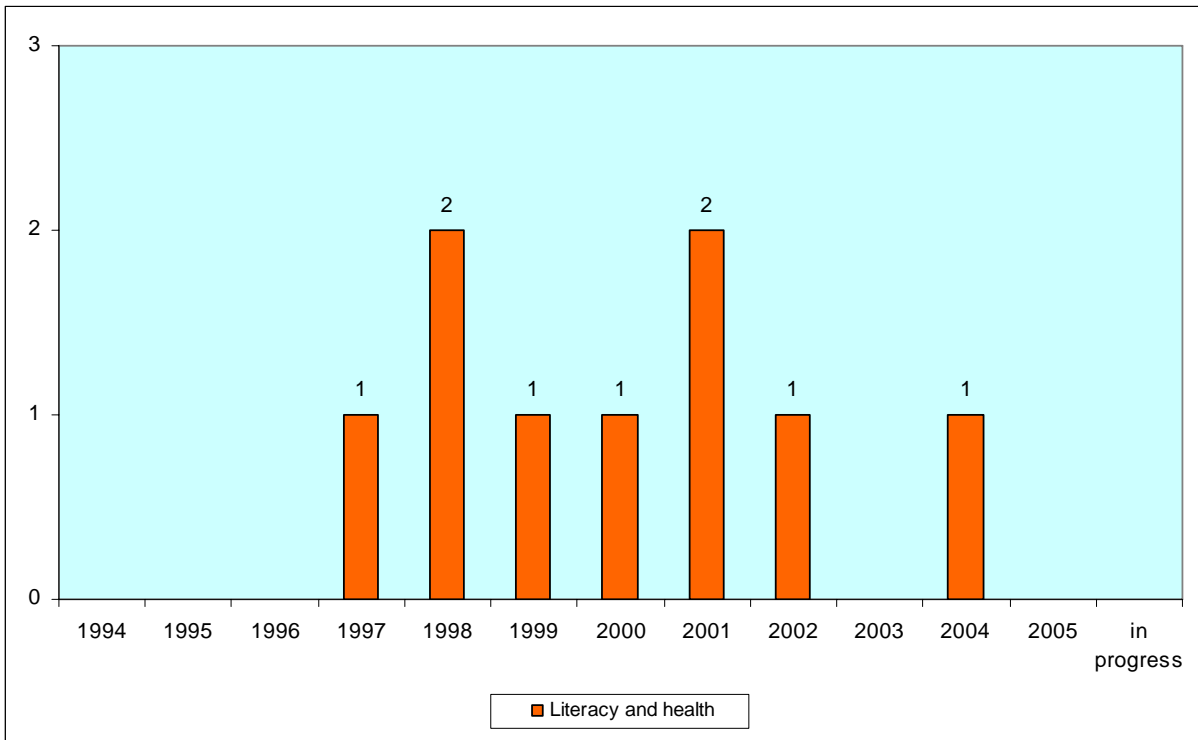
The time distribution of the works dealing with literacy and health is quite spread out. With the exception of 2003, when there were no publications, every year from 1997 to 2004 has at least one indexed publication; there are two for each of 1999 and 2001. As regards the publishers, university settings represent 33% (3 out of 9) of the publications: the Université de Montréal (2, including a doctoral dissertation) and the Université de Moncton (a master's thesis). The other documents are from Statistics Canada, the Groupe de recherche en éducation-santé, Groupe Alpha-santé, Centre for Literacy of Quebec, Canadian Institutes of Health Research and another research study whose record does not specify a publisher.

Quebec, with five (5) indexed research studies, is the most prolific place of publication in the field of "literacy and health", followed by Ontario (2) and New Brunswick (1); the final document does not offer any information to locate it. Moreover, although it comes under the Université de Montréal, the doctoral dissertation by Sanou (1999) focuses on the situation of the newly literate women of

Burkina Faso, which makes it possible for anyone who is interested to establish certain parallels with the situation in Canada.

Many of the research studies are on a substantial number of subjects. Three research studies involve over 100 people: 114 for the Centre for Literacy of Quebec (2001), 208 for Dubois *et al.* (2001) and 360 for Boyer and Boucher (1998). Apart from two research studies based on the data gathered by the National Population Health Survey (NPHS) and on the data from the IALS (Roberts and Fawcett, 1998) or on a study of written documentation (Petch, Ronson and Rootman, 2004), the other researchers focused on more limited groups: Sanou (1999), 16 people; Parent (1997), 33; Kaszap *et al.* (2000), 53; and Rootman *et al.* (2002), 73.

As regards the data collection methods, some researchers used more than one approach in their research: Sanou (1999), the Centre for Literacy of Quebec (2001) and Rootman *et al.* (2002) used both individual interviews and group meetings. One research team (Dubois *et al.*, 2001) gathered data through questionnaires. The other researchers use qualitative methods, such as a participatory approach (Parent, 1997), document content analysis (Roberts and Fawcett, 1998; Petch, Ronson and Rootman, 2004) or interviews, both individual (Boyer and Boucher, 1998) or focused (Kaszap *et al.,* 2000).

After reading the different records that make up the topic on literacy and health, one clear but unsurprising constant appears: there is a connection between illiteracy and a greater predisposition to health problems (Parent, 1997; Boyer and Boucher, 1998; Roberts and Fawcett, 1998; and Kaszap *et al.*, 2000).

The research on this topic has generated four sub-topics. First, there is the one dealing with "the impact and consequences of illiteracy on health"; next comes the one on "the accessibility and availability of information for the illiterate"; and then the one on "literacy and mental health"; and, finally, the one on "illiteracy in a rural setting".

3.6.1 Impact and Consequences of Illiteracy on Health

Illiteracy cannot be summed up as a "simple" difficulty with reading and writing, and everything that that implies should be taken into account. The six (6) research studies on the impact and consequences of illiteracy on health reveal that the repercussions are significant. For example, the report by Roberts and Fawcett (1998) points out that 74% of elderly individuals with level 1 and 2 reading skills find themselves reading the instructions for a recipe or those on medicine containers on a daily basis. Considering that 66% of elderly people at level 1 and 90% of those at level 2 overestimate their ability to read (Roberts and Fawcett, 1998), this daily reading may turn out to be hazardous to their health.

Petch, Ronson and Rootman (2004) state that the goal of health-related literacy is not just to be able to decipher medicine bottle labels or prescriptions, but it is also the ability to receive and understand health-related information. The situation leads them to address the direct and indirect impacts of illiteracy. Although the direct repercussions are more obvious (difficulties reading and understanding bottles, prescriptions and higher workplace injury risks as a result of a poor understanding of safety-related instructions), the indirect consequences are no less important. The issue then is unemployment, poorly paying jobs, stress, vulnerability, an unhealthy lifestyle, and longer and more frequent hospitalizations.

In a master's thesis presented at the Université de Moncton in New Brunswick, Parent (1997) focused on the use of [translation] "two low-cholesterol diet teaching methods on the knowledge, dietary behaviours and lipid profile of a 'hypercholesterolemic' functionally illiterate population". The aim of the study was to assess one diet method suited to the limitations of the illiterate, while the second group was treated with the traditional method. The researcher says she observed convincing results in terms of knowledge and dietary behaviour within the group subjected to the new method. She also mentions a decrease in the LDL-cholesterol level, but did not indicate any fluctuation in the lipid profile between the two groups. Adapting the instructions for the low-cholesterol diet to the limitations of those with low literacy levels made it possible to partially improve their health. Parent (1997) suggests that further research be conducted on other types of illnesses, such as diabetes.

Petch, Ronson and Rootman (2004) also lean toward the improvement and adjustment of health-related information in order to make it more accessible to individuals with no or poor literacy skills. The use of plain language, as well as illustrations and videocassettes, should correct the situation. The research by Kaszap *et al.* (2000) also goes in this direction, whereas another research study on nutrition uses the terms of health logos, visual ranges and specialist dietary advice (Dubois, Viens, Vandal, Kaszap, Beauchesne, Ollivier and Ajar, 2001). These data go over some elements that were addressed in topic 2, *accessibility and retention*.

Rootman, Gordon-El-Bihbety, Frankish, Hemming, Kaszap, Langille, Quantz and Ronson (2002) conducted evaluative and documentary research for the Social Sciences and Humanities Research Council and Canadian Public Health Association, the goal being to identify the gaps in the research, the initiatives pending and at the planning stage, as well as the resources and avenues to be explored in the field of research on literacy and health in Canada. The research team confirms that [translation] "although there is a great number of literacy education and health programs in Canada, there are serious gaps in the research in this field." The results of the study are set out in 6 parts, namely 1) pending and proposed Canadian projects in the field of literacy education and health; 2) promising Canadian studies in this field; 3) a census of Canadian researchers interested in the subject; 4) the identification of various gaps; 5) obstacles to research; and 6) solutions and avenues to be explored. The authors, like the individuals interviewed for the research, consider

that the population still is not informed enough about health and that further research is required.

To these authors (Rootman *et al.* 2002), three broad points must be covered in order to develop the field of study of literacy and health: clarifying the literacy education-health issue; developing arguments to make decision-makers aware of the need to improve research and practices in the field; and setting up participatory action-research to improve the health and literacy education of the entire population. Petch, Ronson and Rootman (2004), for their part, suggest focusing on the impact the low literacy level is having on healthcare system costs and promoting the study of the special needs of Aboriginal peoples, Francophones and immigrants.

3.6.2 Accessibility and Availability of Information for the Illiterate

In this sub-topic, we go over certain research records dealt with in the previous section, since Kaszap *et al.* (2000) and Petch, Ronson and Rootman (2004) addressed the issue of the need for clear and simple writing, illustrations and videocassettes in order to convey information to individuals with low literacy levels, whereas Dubois *et al.* (2001) offer suggestions for improvements and set out their impact. In particular, the latter research report stresses the problems the illiterate encounter when the time comes to go grocery shopping, especially if they have to follow a diet prescribed by a health professional. According to the authors, 38% of the elderly population is living with chronic illnesses, but it is difficult for them to look after themselves as many have difficulty understanding the instructions of health professionals, reading safety instructions and grasping health-related information since the latter are often written. Dubois *et al.* (2001) also maintain that grocers are open to the idea of promoting foods for a healthy diet, although they are not currently doing so. According to the researchers, grocery stores would actually be a good place for reaching the illiterate.

Much like with diets, the patient's proper understanding of instructions is crucial for the treatment of illness. Kaszap *et al.* (2000) stress that some elderly people worry about their ability to manage their health. The latter will often not be very inclined to question the health professional, and they will have difficulty making the connection between their health condition and the prescribed treatments (Kaszap *et al.*, 2000). The Centre for Literacy of Quebec (2001), for its part, stresses that health information is generally of a highly standardized nature and rarely adapted. The usefulness of the available documents is therefore limited, since a language barrier conceals their meaning. The Centre for Literacy, in cooperation with the Comité directeur sur l'alphabétisation-santé of Montréal General Hospital, analyzed the health information and health education needs of so-called "marginal" patients, that term having been used to refer to multiple factors that hinder communication, such as literacy level, language barriers, trauma stemming from a situation experienced in a country ravaged by war, physical disability or cognitive problems. Following the initial analysis

phase, another phase of the project was started in 2001-2002. Titled "Au-delà du langage clair et simple: Adapter la communication dans le domaine de la santé aux besoins des patients difficiles à rejoindre", it entailed applying and documenting the recommendations from phase 1. In particular, the recommendations on producing suitable materials and establishing participatory health education committees in three units of the hospital were followed. The research made it possible to observe that the issue of accessible information affected a substantial percentage of the population served. It follows that improving health literacy will be beneficial not only for patients, but also for their families and friends.

The study by Roberts and Fawcett (1998) also offers further information on the situation of elderly illiterate individuals. Relying on the data from the National Population Health Survey (NPHS) and from the IALS, the report indicates that 79% of elderly individuals have level 1-2 reading skills, whereas this is the case for only 33% of 16- to 24-year olds. Of those elderly individuals, 66% of those at level 1 and 90% of those at level 2 overestimate their reading skills, which, in some cases, could result in health risks, especially since 74% of elderly individuals with level 1 and 2 reading skills read instructions for recipes or medicine containers on a daily basis. Considering the growth in Canada's elderly population, Roberts and Fawcett (1998) state that literacy urgently needs to become an important health-promotion issue.

Finally, Kaszap *et al.* (2000) consider that developing health education strategies and tools that are adapted to the needs of elderly individuals with low literacy levels who suffer from a cardiovascular disease would promote self-care and compliance with treatment.

3.6.3 Illiteracy and Mental Health

Only one indexed research study focused on the connection that might exist between literacy and mental health. Boyer and Boucher (1998) maintain that not being able to read and write results, in particular, in a lack of self-esteem and in self-deprecation, which may cause depression and reinforce exclusion. The authors suggest that the survey they conducted of 360 learners enabled them to determine that many have considered or attempted suicide in the past. Illiteracy therefore has much more profound repercussions than simply not being able to read and write: poorer mental health was noted among very illiterate individuals. However, during their research Boyer and Boucher (1998) were unable to establish a direct link between participation in literacy education activities and better health.

Boyer and Boucher (1998) recommend that year-long studies be conducted, with monthly meetings with the participants, in order to better assess the impact of literacy education on the mental health of the illiterate. They also suggest that literacy education workers receive better training with respect to mental disorder detection and suicide prevention.

3.6.4 Illiteracy in a Rural Setting

One record belongs to this sub-topic. The doctoral dissertation by Sanou (1999), titled "L'utilisation de connaissances de l'alphabétisation fonctionnelle en hygiène et en nutrition familiale par les femmes rurales du Burkina Faso", defines three forms of use (symbolic, conceptual and instrumental) and three types of knowledge use (total, partial or non-use). The aim of the research is to determine the types of and factors for use and non-use of knowledge. The factors are associated with the context, user, training and communication. As regards context, cultural factors play a major role in the application of a given bit of knowledge. In Burkina Faso society, young women are not the ones with decision-making authority: the mother-in-law, husband or oldest family members hinder the practice of health-related knowledge acquired through literacy education. Men in Burkina Faso are also not attracted by literacy education, nor are they sensitive to the situation of women. Thus, women in Burkina Faso are living in a traditional society where a gender-based division of labour governs daily life.

The research by Sanou (1999) raises the issue of the language of literacy education, because the women of Burkina Faso are not taught to read and write in their mother tongue, which, according to the author, hinders the integration and use of acquired knowledge. The author recommends that training be offered in the learner's mother tongue and that comparative studies be conducted on individuals who received their training in their mother tongue and others who received their training in a second language.

3.6.5 Summary of Topic 6: Literacy and Health

The topic *literacy and health* includes all of the research on literacy education and health. Of the nine records, five (5) are from Quebec, two (2) are from Ontario, one (1) is from New Brunswick, and the last one does not specify a location. Three of the nine reports (33%) were published in university settings, including one record for a master's thesis and another for a doctoral dissertation.

Although most of the documents deal with different issues, most (6) stress the pernicious effects that illiteracy has on health. All that is required in order to grasp the related issues is to consider the difficulty some people have reading a prescription, finding suitable foods in a grocery store in order to follow a specific diet, understanding the safety instructions for a product or understanding the instructions on medicine bottles. This reality led a few researchers to make numerous recommendations in order to mitigate the limitations of the illiterate and to help them better manage their health.

Irrespective of the age group concerned, many authors maintain that, in order to promote health literacy and properly convey information, it is necessary to use

plain language, illustrations and multimedia presentations, in particular videocassettes or other visual media. These types of adjustments could assist illiterate individuals grappling with serious reading and writing difficulties. Adapted literacy could reduce the lack of self-esteem and the self-deprecation experienced by those with low literacy levels, in particular by facilitating their social integration. These elements are even more important for the elderly, many of whom have to take medication; the risk of a misunderstanding could seriously harm their health.

Many authors agree that there are gaps in the health system in terms of communication with the illiterate. This problem is relatively worrisome if one considers Canada's aging population. It would also be preferable for the literacy education process to take place in the learner's mother tongue, since this would facilitate the assimilation and retention of the information acquired during training.

Several avenues of research are presented. The authors suggest studying the situation of the under-educated as regards certain diseases, such as diabetes; pursuing further knowledge on the issue of literacy and health; identifying the special needs of Aboriginal peoples, Francophones in a minority setting and immigrants; assessing the impact of low literacy levels on healthcare system costs; and setting up participatory action-research aimed at improving the health and literacy education of the entire population.

In fact, the health literacy field should be developed for everyone, in particular by studying where continuing education in health occurs, both in a formal setting (daycare centres, schools, training centres, etc.) and in an informal setting (families, recreation centres, resource centres, virtual communities, etc.). Research on literacy and health should contribute to the development of the concept of the "apprentissanté" [health learning].

3.6.6 List of Research Studies on the Topic of Literacy and Health

Boyer, Richard; Boucher, Caroline. *La santé mentale des personnes avec des difficultés sévères de lecture et d'écriture: une problématique en marge mais loin d'être marginale: rapport de recherche*. Université de Montréal. Centre de recherche Fernand-Séguin, Montréal, Quebec, 1998.

Centre for Literacy of Quebec. *Needs Assessment for the Health Education and Information Needs of Hard-to-Reach Patients: Summary Report and Recommendations / Centre for Literacy of Quebec*. Centre for Literacy of Quebec, 2001.

Dubois, Lise ... [et al.]. *Évaluation d'un nouveau lieu d'alphabétisation: l'épicerie-santé*. Groupe Alpha-Santé, [Montréal], 2001.

Kaszap, Margot ... [et al.]. *Besoins d'éducation à la santé chez une clientèle âgée peu alphabétisée atteinte de maladies cardio-vasculaires: une étude exploratoire*. Groupe de recherche éducation-santé, [S.l.], 2000.

Parent, Chantal. *Effet de deux méthodes d'enseignement du régime hypocholestérolémiant sur les connaissances, les comportements alimentaires et le profil lipidique d'une population analphabète fonctionnelle hypercholestérolémique*. Centre universitaire de Moncton. École de nutrition et d'études familiales, Moncton, New Brunswick, 1997.

Petch, Elsie; Ronson, Barbara; Rootman, Irving. *Literacy and Health in Canada: What We Have Learned and What Can Help in the Future?: A Research Report / clear language edition produced by: Elsie Petch, Barbara Ronson and Irving Rootman*. Canadian Institutes of Health Research, 2004.

Roberts, Paul; Fawcett, Gail. *At Risk: A Socio-economic Analysis of Health and Literacy Among Seniors*. Statistics Canada; Canada. Human Resources Development Canada, Ottawa, Ontario, 1998.

Rootman, Irving; Gordon-El-Bihbety, Deborah; Frankish, Jim; Hemming, Heather; Kaszap, Margot, Langille, Lisa; Quantz, Darryl; Ronson, Barbara. *National Literacy and Health Research Program: Needs Assessment and Environmental Scan / Irving Rootman ... [et al.]*. [s.n.], 2002.

Sanou, Ségué Sylvie. *L'utilisation des connaissances de l'alphabétisation fonctionnelle en hygiène et en nutrition familiale par les femmes rurales du Burkina Faso*. [Université de Montréal], [Montréal], 1999.

3.7 Literacy and Technology

Information and communications technologies (ICT) are playing an increasingly large part in our society, and it is virtually impossible to get through a day without being exposed to them. Curiously, despite this dazzling growth, only 8% of the literacy education research in the RÉCRAF database focuses on them. This topic actually includes only 13 records. The research studies they describe were conducted between 1996 and 2004, and come from several provinces: Manitoba (1), Ontario (3), Quebec (5) and New Brunswick (1); two others cover all of Canada (2). It should be noted that two of the research studies conducted in Ontario are joint studies with Quebec.

A reading of the thirteen records enables the topic of literacy and technology to be subdivided into three large sub-topics. Firstly, there are research studies (4) that focus on the needs of organizations, on their interests in a literacy education network and on the obstacles they encounter. Secondly, five (5) research studies deal with the use of technologies by learners and educators, women and men. The final sub-topic includes four (4) research studies and analyzes programs and software used in the literacy education field.

Figure 3.7 – Distribution of research studies on the topic of literacy and ICTs by year (N=13)
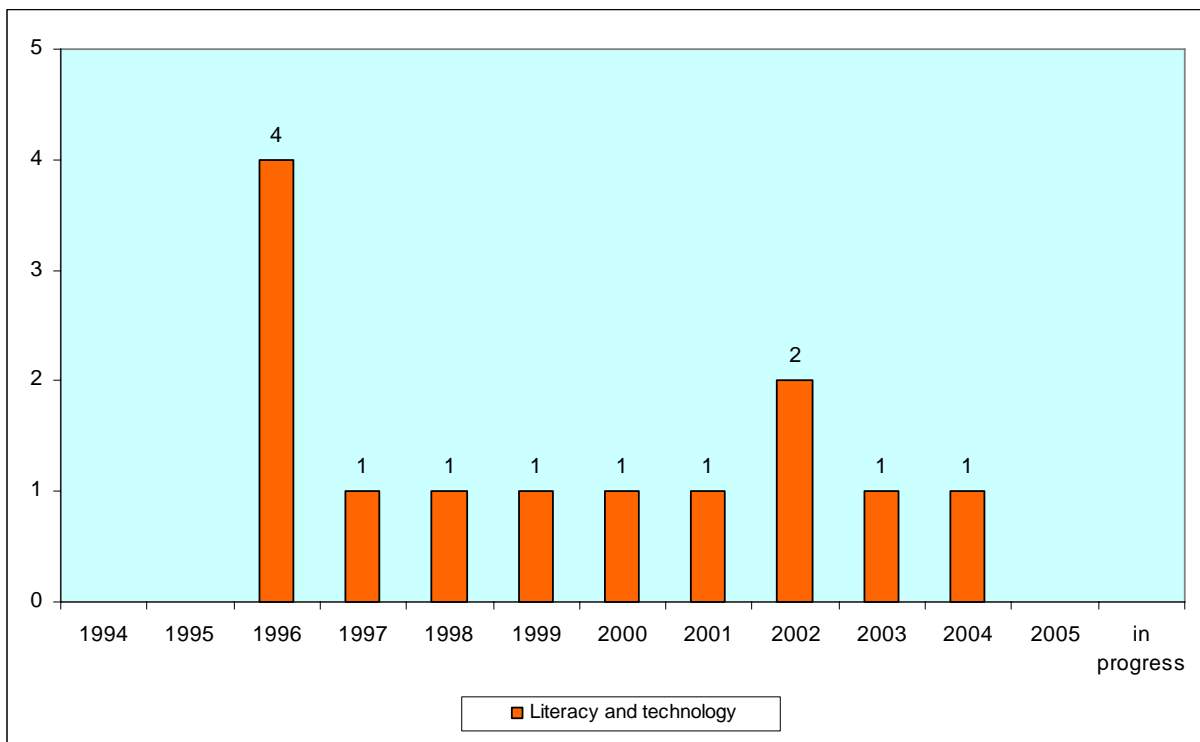
3.7.1 Literacy centres' ICT-related Interests, Needs and Obstacles

Four (4) research studies focused on the "realities" of literacy education organizations. Three of them, conducted in 1996 (2) and 1997 (1), look into the possibility of creating an interprovincial literacy education network and aim to determine the groups' technology needs.

The research by Blain and Tremblay (1996) raises the common interest of Francophone literacy education organizations in Quebec and Ontario in creating a telematics network to promote communication and the exchange of ideas. According to that research, Ontario and Quebec differ in two ways: on the one hand, Ontario is clearly ahead of Quebec in terms of equipment (66% of organizations in Quebec had a microcomputer at the time of the research, versus nearly 100% for organizations in Ontario), and, on the other hand, Quebec's organizations seem more interested in communicating amongst themselves than with their colleagues in Ontario, whereas Ontario's organizations display a clear willingness to communicate with their counterparts in Quebec. This need to communicate with other organizations working in literacy education is also put forward by Pelletier (1997).

The research funded and conducted by the NLS (Canada, 1996) also analyzes the feasibility of a Canada-wide network. The various interviews conducted made it possible to [translation] "determine seven main types of information needs: training and upgrading for literacy educators, support for literacy education program design, access to teaching materials, the availability of information about individuals working in literacy education and on events taking place in this field, access to research and reference documentation, and administrative tools."

However, both Blain and Tremblay (1996) and Canada (1996) report obstacles due to the lack of computer equipment. Pelletier (1997), in a qualitative and quantitative research study on the needs of community organizations in Quebec, states that slightly more than half of the organizations have at least one computer, but that they do not have a CD-ROM drive. With an equipment purchasing budget of less than $2,000, it is easy to understand why the computer resources available at this time are inadequate for training programs. Everyone agrees, however, that the appropriateness and use of ICTs are key, provided that they allow the organization's values and principles to be retained.

The purchase of computer equipment and the integration of ICTs have an effect on the practices of the grassroots community groups working in the literacy education field. In their report, Quenneville and Dionne (2001) set out the results of their participatory research. They describe the three main conditions for the introduction of ICTs in community settings: a discourse suited to the setting, stability within the groups and consideration of the context in which the organizations exist. The authors mention impacts on the administrative, educational, political and social levels for organizations that set up ICTs. They also discuss the financial

repercussions and the impact on the choice of methods of communication. Finally, Quenneville and Dionne (2001) define two main categories of issues: there are those that concern the needs of the groups and those associated with their social plan and with their mission.

It should be noted that the indexed research does not seem to include any that followed up on the studies into the creation of a Quebec-Ontario or Canada-wide telematics network. However, as Blain and Tremblay (1996) point out, ICT development is such that a literacy education-related telematics network is now spreading worldwide.

3.7.2 Use and Accessibility of Technologies by Learners and Educators

Some research studies (5) focused on studying information and communication technologies for learners and educators. Apart from the research of the New Brunswick Department of Advanced Education and Labour, which dates back to 1996, the other publications are from 2000, 2002, 2003 and 2004, which makes them quite current.

In its report, the New Brunswick Department of Advanced Education and Labour (1996) states that 63% of French-speaking learners have never used a computer. In fact, the report reveals that there is a clear demarcation between the French-speaking and English-speaking communities in terms of computer use. Anglophones use word processing tools twice as much as their French-speaking counterparts. However, learners in both language groups are just as interested in attending workshops about the Internet and e-mail software. New Brunswick (1996) and Kunz and Tsoukalas (2000) stress in their respective research reports that learners feel that computer use would have a positive impact on their learning of reading, writing and numeracy, especially as they would be able to learn at their own pace.

Some learners even perceive the computer to be an opportunity for enjoyment and believe that computer use would facilitate recruitment at literacy education centres (Centre d'apprentissage Clé, 2003). Many also see it as a source of improved self-esteem, increased employment opportunities and a way of developing self-confidence (Kunz and Tsoukalas, 2000).

Although the vast majority (78%) of the learners questioned as part of the research by the Centre d'apprentissage Clé (2003) said that they had a computer at home, the previous report by Kunz and Tsoukalas (2000) states that this is the case for 80% of educators and 33% of learners. There has therefore been a marked increase in individuals who have a computer at home. This study also clearly shows that school is where literacy students and educators use the computer the most, namely 74% and 96%. The uses are different, however: learners read newspapers

(24%) and look for work (21%), while teachers look for information (73%) and use e-mail services (85%).

Kunz and Tsoukalas (2000) also emphasize that the most annoying things about using technologies are the lack of reliability (crashes, viruses, "bugs"), the lack of suitable software for learners (in particular software that is not condescending), the cost of software and information overload on websites (Millar, 1996; De Coster, 2002). The authors also pointed out the fear that some computer tools, such as spelling checkers, will diminish the learners' efforts.

Two final research studies are included in this sub-topic. One of them deals with the use of ICTs for the purpose of informing elderly illiterate people (Kaszap, 2002) and the other is about the issue of deaf illiterate people (Dubuisson, 2004). The study on the elderly indicates the importance of developing communication tools to help them with respect to health. Health professionals think that a program containing information about diabetes, smoking, a healthy diet and factors related to cardiovascular diseases would be valuable. However, the research points out the need for elderly illiterate people to receive proper training and for the program's design to take into account user-friendliness (use of a touch screen, for example), ergonomics and accessibility (such as community centres).

In the case of the deaf, illiteracy is a serious issue: in 1991, it was estimated that 65% of deaf people were illiterate. ICTs make it possible to develop courseware that is suited to these people's realities (Dubuisson, 2004), since their reading problems result from a lack of word recognition and comprehension. A group of hearing researchers and deaf contributors took part in creating courseware that [translation] "includes a series of activities centred on contexts [...] that help the adult learner to recognize written words, understand them and use them in different contexts." This program enables the deaf to become independent as regards the comprehension of texts to be read. Since a team of deaf people was involved in developing the courseware, the deaf community has a positive perception of it. This combination of hearing researchers and non-hearing contributors offers a positive view of hearing-deaf relations.

Of the five records that make up this sub-section, only the one by the Centre d'apprentissage Clé (2003) indicates a gender-based difference and reports a low rate of computer workshop participation by men. The research points out the need to make men more aware of registering for workshops.

3.7.3 Information Technology-related Learning Strategies and Educational Computer Program Use

In their research studies, Lambert (1998) offers a website quality assessment grid in order to determine user-friendliness, whereas Thériault (1999) studies the use of Canada-wide discussion groups on the Internet. Both, like Dubuisson (2004), mention that learners who take part in projects using technology are highly motivated.

Computer use also seems to be able to retain learners' interest (Thériault, 1999). Using ICTs and educational computer programs has also helped some learners to overcome their fear of computers and the Internet, and others to develop a thirst for knowledge (Lambert, 1998).

The last two research studies in this section, namely those by Millar (1996) and De Coster (2002), focused on educational software use. Tests on illiterate people at three different levels made it possible to determine the factors that promote the use of this software: the software must develop initiative, discovery, creativity, independence and mutual aid (De Coster, 2002). Software that is perceived as too complex or condescending will have a demotivating effect on learners. De Coster (2002), while promoting the use of educational software, still cautions against poor software choices and over-eagerness to set up workshops using ICTs. She indicates that the use of software requires adaptation and adjustment on the part of the organization. The author also stresses the importance of using a teaching method that considers the tastes and needs of learners and that alternates between so-called "regular" workshops and workshops using computers.

The research by Millar (1996) compared the use of integrated learning systems (ILS) and stand-alone software. The study showed that the use of literacy education courseware had the following advantages: the acquisition of basic computer skills, the option of working alone or with others, the increased prestige and lure of the programs, and quick feedback from learners. According to the author, ILSs have no real advantages over stand-alone software other than the fact that they make it easier to manage files and monitor learner progress.

Financially, the use of ILSs is very expensive as they cost three hundred times more than stand-alone systems; however, suppliers do offer training to teachers who use them (Millar, 1996). The author suggests offering more basic computer courses to adults in literacy education, and she also encourages software designers to develop products that give users more control over their learning process.

The authors' conclusions therefore seem to be along the same lines as regards the use of ICTs in literacy education. Lambert (1998) wants more research on the potential uses for ICTs in the literacy education field. For their part, Kunz and Tsoukalas (2000) and the Centre d'apprentissage Clé (2003) state that it is important to improve learner access to computers and the Internet. However, as Millar (1996) points out, the quality of ICT-assisted literacy education training depends on the training teachers receive on the use of those ICTs.

3.7.4 Summary of Topic 7: Literacy and Technology

The topic *literacy and technology* includes 13 research reports. The records were divided into three main sub-topics: "literacy centres' ICT-related interests, needs and obstacles" (4); "use and accessibility of technologies by learners and educators"

(5); and "technology-related learning strategies and educational computer program use" (4).

The first studies conducted in 1996, and those that followed, assessed and stressed the potential importance of setting up a Canada-wide telematics network in literacy education. However, although everyone is interested, organizations are dealing with obsolete equipment and budgetary constraints that they have to come to terms with. The data reveal, however, that Anglophone literacy education centres have more and better computer equipment. Therefore, there is a technological gap to be filled before setting up a network to connect the many organizations in both communities. Moreover, the installation of computer tools is not without consequence for organization management. From then on, teachers and managers must make adjustments on the administrative, educational, policy and social levels.

Many learners perceive ICTs as a more stimulating source of learning. Most have a computer at home, but they are mainly introduced to computers at school. Once again, it would seem that Anglophones are slightly ahead in terms of computer use at home. If it were not for computers crashing (viruses and "bugs"), the cost and the condescending nature of some software, ICT-assisted learning would appeal to learners. Nevertheless, it is important to combine the use of ICTs with varied and adapted teaching methods involving both computer-based workshops and traditional workshops. Many learners and teachers are, however, asking for greater computer equipment availability and access to the Internet outside of official course hours.

Moreover, ICTs make it possible to communicate with and teach groups of illiterate people who would be difficult to reach otherwise. The proper use of ICTs, whether to inform the elderly about diseases (causes, symptoms, prevention) or to help the deaf with the literacy education process, makes it possible to create appropriate tools that reflect their respective limitations and needs.

Finally, some of the research studies focus on the ways in which learners learn. It emerges that participation in projects and activities that concern them is a major source of pride, self-esteem and learning for the illiterate. Students also prefer software that enables the development of initiative, discovery, creativity, independence and mutual aid. Stand-alone courseware does not have any drawbacks compared with integrated learning systems (ILS), and both may be used in training. Although they are more expensive, ILSs do, however, enable better learner-related file management and progress monitoring. In any case, the use of ICTs in literacy education requires proper training for teaching staff.

Despite the knowledge developed under the topic of literacy and technology, further work would be required in order to better understand the impact of technologies on the experiences of individuals who have difficulty reading and writing.

3.7.5 List of Research Studies on the Topic of Literacy and Technology

Blain, François; Tremblay, Hélène. *Feasibility Study: Synthesis Report*. Boîte à projets inc., [Boucherville, Quebec], 1996.

Canada. National Literacy Secretariat. *Needs Assessment for an Electronic Infrastructure for the Canadian Literacy Community*. Canada. National Literacy Secretariat, Ottawa, Ontario, 1996.

Centre d'apprentissage Clé. *Impact des NTIC sur l'apprentissage des apprenants et apprenantes du Centre d'apprentissage Clé*. Centre d'apprentissage Clé, Saint-Cyprien, Quebec, 2003.

De Coster, Élise. *S'ouvrir au monde: l'utilisation des logiciels éducatifs dans un contexte d'alphabétisation populaire: une expérience significative*. Carrefour d'éducation populaire de Pointe Saint-Charles, Montréal, 2002.

Dubuisson, Colette. *Outils informatisés dédiés à l'alphabétisation des adultes sourds: recherche des paramètres favorisant le succès des apprentissages*. Quebec; Ontario, 2004.

Kaszap, Margot. *Rapport de recherche: évaluation de l'applicabilité des nouvelles technologies de l'information et de la communication dans le domaine de l'éducation à la santé des adultes peu alphabétisés atteints de maladies cardiovasculaires*. Groupe de recherche Alpha-santé, Montréal, 2002.

Kunz, Jean Lock; Tsoukalas, Spyridoula. *Riding the Technology Wave: Experiences of Adult Literacy Students and Teachers in Ontario*. Canadian Council on Social Development (CCSD), Ottawa, c2000.

Lambert, Diane. *Création et expérimentation d'une grille d'évaluation de sites Internet réutilisable en alphabétisation: rapport d'expérimentation*. [CLÉ; Association], [Montréal, Quebec], [1998].

Millar, Diane. *Executive Summary of the Use of Educational Software in Adult Literacy Programs: A comparison of Integrated Learning Systems and Stand-alone Software*. Canada. National Literacy Secretariat, Ottawa, Ontario, 1996.

New Brunswick. Department of Advanced Education and Labour. *Technology and Literacy Report*. New Brunswick (Province). Department of Advanced Education and Labour, (S.I.), 1996.

Pelletier, Francine. *Communautique: rapport de l'étude de besoins*. Institut canadien d'éducation des adultes (ICÉA); Puce communautaire (Association), Montréal, Quebec, 1997.

Quenneville, Serge (dir.); Dionne, Alice (dir.). *L'impact des nouvelles technologies sur les pratiques d'un groupe populaire en alphabétisation*. Centre de lecture et d'écriture (CLÉ Montréal), Montréal, 2001.

Thériault, Gilles. *Recherche exploratoire sur l'utilisation d'un forum de discussion sur Internet par un groupe d'apprenants en alphabétisation*. Fédération canadienne pour l'alphabétisation en français (FCAF), Vanier, Ontario, 1999.

3.8   Family Literacy

For the topic of family literacy, the RÉCRAF indexed research studies concerning adults and not those relating to child populations. So defined, the topic includes nine (9) documents. It deals with the parent-school relationship and the parent-child relationship during the literacy education phase. Parents' perceptions are also among the aspects studied. Three sub-topics were established: the first includes those texts that describe parents with low literacy levels and their perception of school (3); the second consists of two (2) research studies on the parent-school/school-parent relationship; and the third sub-topic includes four (4) impact assessments on literacy education programs for parents with low literacy levels. The research studies are qualitative, although some use quantitative data.

Figure 3.8 – Distribution of research studies on family literacy and literacy among young children by year (N=9)
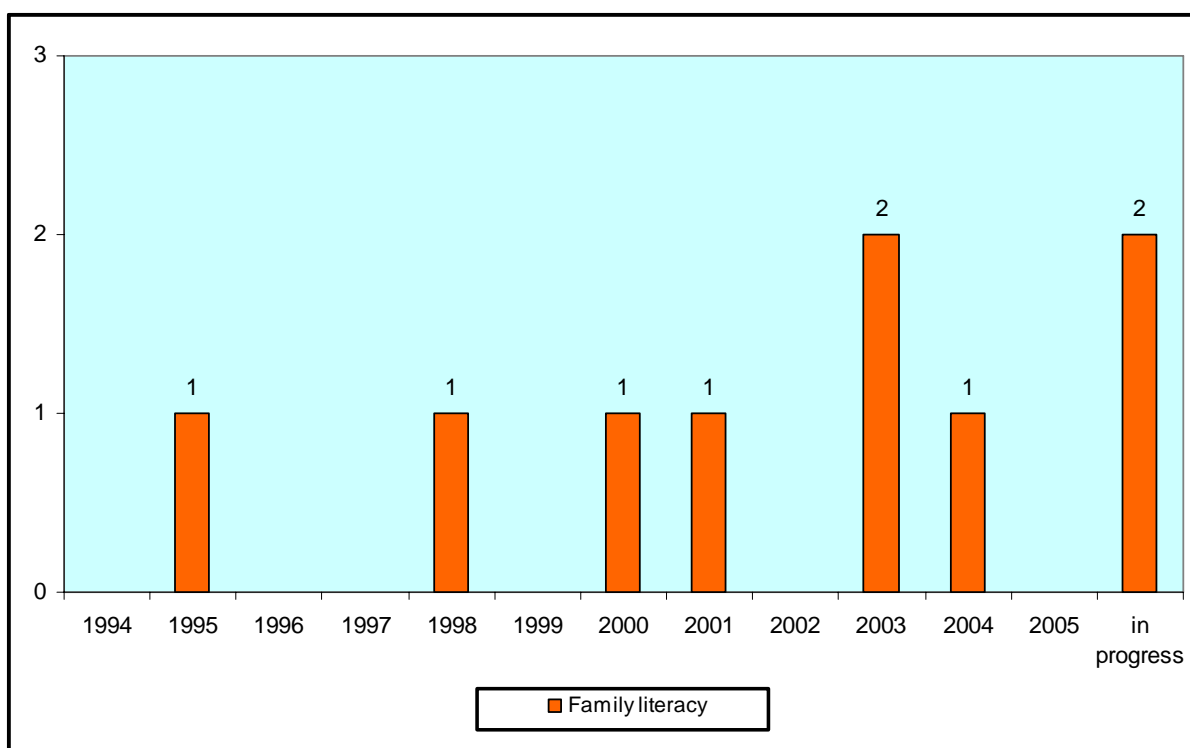
3.8.1 Abilities and Description of Parents with Low Literacy Levels

Three (3) studies were classified in the "abilities and description of parents with low literacy levels" section. The purpose of the research was to identify the parental role in education, parental perceptions and expectations, and the impact of literacy education on the relationship parents have with the assistance they provide to their

children in training. Exploratory research was conducted for the Commission scolaire Jacques-Cartier, which wants to set up an illiteracy prevention program (Bittar, Lemay and Blain, 2005). Drolet, Legros and Roy (2001), in collaboration with a grassroots community literacy education group, a primary school and a "maison de la famille", analyzed family traits in an underprivileged neighbourhood. The third study aims to highlight the opinions and beliefs of individuals in literacy education and their relationships with their families (Garnier, 2004).

The methodologies used are qualitative. Meetings were held with groups or individuals. The illiterate parents approached for the research studies were generally engaging in literacy education activities, but this was not the case for everyone.

Parents, even those with low literacy levels, have a positive attitude about education and would like to have a positive influence on their child's educational pathway. However, few illiterate parents engage in reading and writing activities at home. Those activities are mainly associated with functional consumption and management needs (Drolet, Legros and Roy, 2001). Parents who take part in a literacy education activity feel more capable than others of helping their child with his or her studies (Bittar, Lemay and Blain, 2005). In fact, it is a source of motivation for them to go back to school. For the most part, the parents have had academic failures and have low self-esteem (Bittar, Lemay and Blain, 2005). Homework may be difficult for them because of the child's lack of interest and the lack of confidence of some parents, who are afraid of making a mistake or of being corrected by their own child (Drolet, Legros and Roy, 2001). Many have difficulty communicating with institutions; the parents and school staff members do not seem to know each other very well.

Garnier (2004) suggests putting into perspective the factors that account for intergenerational illiteracy, such as the parents' income and education. Literacy is a complex phenomenon that involves deeper cultural factors that transcend ethnic origin and socioeconomic status. The purpose of Garnier's project is to understand how the systems of social representations of literacy are involved in the development of a culture of literacy and continuous learning in the family. Garnier's research work has been completed but not published.

The workers questioned believe that literacy education interventions should be geared toward the family as a whole, and that they should be progressive, gratifying and based on self-esteem (Bittar, Lemay and Blain, 2005).

3.8.2 Parent-School Relations

The parent-school relations section deals with perception and communication on the part of both parents toward the school and the teaching staff toward parents with low literacy levels. The two (2) texts that make up this sub-topic are research reports from 2003. One focuses on the aspect of communication with under-educated parents (Filion, 2003), whereas the other deals more with academic support for

parents from underprivileged backgrounds (Kanouté, 2003).

Kanouté (2003) questioned about thirty parents during semi-directed interviews and held three meetings with workers. Filion (2003) gathered information through discussion groups and also relied on studies that had been published on the subject.

Kanouté (2003) notes that children's failure rate is higher in the underprivileged areas of Montréal. The causes seem to be poor surroundings and a lack of intellectual stimulation, a defeatist attitude about control over one's environment and giving up on academic goals for fear of disappointment. The author corroborates the previous studies, which highlight the fact that parents are aware of their responsibilities and of the importance of school. Filion (2003) points out that the parents feel guilty and are concerned about their child's success, and that teaching staff members have a negative perception of the parents' commitment.

Parents acknowledge the competence of teaching staff, but are not sure that they are making themselves understood by those teachers (Filion, 2003). They consider that their ways of doing things are unfairly interpreted by school staff. Parents require more open-mindedness and friendliness from the school setting as regards communication (Kanouté, 2003). They would like the school to adapt to their ability to provide support, especially as concerns homework supervision. Filion (2003) notes that schools ask parents to look after their children, but position themselves as the sole judge of the teaching methods and rules to be followed. To parents, schools are not transparent and do not share information that is vital for successful communication.

At the end of her study, Kanouté (2003) recommends that schools get to know and recognize the setting and its resources. School projects should consider parenthood as a whole and respect parents' actual abilities with respect to academic support and learning.

3.8.3 Assessment and Impact of Programs for Parents with Low Literacy Levels

Of the four (4) documents in the section titled "assessment and impact of programs for parents with low literacy levels", two (2) were published in 1998 (Couture; Lavoie and Lévesque) and one in 2000 (Lavoie, Lévesque, Roy and Shaw). They are research reports funded by the IFPCA. The research published in 2000 is actually the continuation of the work done in 1998 on assessing the program *On découvre l'écrit, je t'aide pour la vie*. The other two documents are projects in progress (Coalition francophone pour l'alphabétisation et la formation de base en Ontario and Lyonnais). These studies focus in particular on the impact of literacy education on parents with children in preschool. Programs have been assessed or are in the process of being assessed.

The research is qualitative. The researchers followed up with parents with low literacy levels (Couture, Lavoie and Lévesque, 1998) and with groups of individuals who had or had not taken part in the assessment programs (Lavoie, Lévesque, Roy and Shaw, 2000). The projects in progress will also gather data by meeting with stakeholders involved in the training activities.

The programs assessed to date have had a positive impact on parents. They have enabled them to develop an understanding of the seven factors for writing emergence: discovering the functions of writing, speaking like a book, establishing relationships between the oral and written, mastering the thrust of reading, knowing writing-related concepts, becoming aware of the sound aspect of language and discovering the writing process (Couture, Lavoie and Lévesque, 1998). Parents adopted new behaviours following their training, in particular as concerns their role as educators. The results of the research by Lavoie, Lévesque, Roy and Shaw (2000) confirmed the positive impact the parents' training had on the children's academic progress. The program, through the parents, seems to contribute to the emergence of the children's writing skills.

The Coalition francophone pour l'alphabétisation et la formation de base en Ontario has announced that it is doing research to measure the impact of family literacy education programs on Canada's French-speaking families. The five-year study should be completed in 2008.

Lyonnais (in progress) is conducting action-research for the Commission scolaire des Navigateurs. This school board offers workshops on supporting the parental role, and the author wants to determine if they can: break the cycle of illiteracy, reduce the risk of children dropping out of school, increase parents' motivation as concerns their child's success and progress, and increase the enjoyment of reading and writing among parents and children. He has noted that parents with low literacy levels are more difficult to reach than others. The action-research will be both qualitative and quantitative. The results are expected to be released in late 2005.

3.8.4 Summary of Topic 8: Family Literacy

The editorial policy of the RÉCRAF is such that research on *family literacy* dealing solely with a child population was not included. Three sub-topics were established for the research on adults: "abilities and description of parents with low literacy levels" (3); the "parent-school relationship" (2); and "assessment and impact of programs for parents with low literacy levels" (4). The research studies are qualitative, although some use quantitative data.

For the most part, parents with low literacy levels have had academic failures and have low self-esteem. Homework may be difficult for them because of the child's lack of interest and their own lack of confidence. Some parents are actually afraid of

making a mistake or of being corrected by their own child.

Many illiterate parents have difficulty communicating with institutions. The misapprehension between parents and school staff members seems mutual. Parents acknowledge the competence of teaching staff, but are not sure that they are making themselves understood by those teachers. Parents require more open-mindedness and friendliness from the school setting as regards communication. They would like the school to adapt to their ability to provide support, especially in terms of homework supervision.

Parents, even those with low literacy levels, have a positive attitude about education and would like to have a positive influence on their child's educational pathway. Parents who take part in a literacy education activity feel more capable than others of helping their child with his or her studies. The programs had a positive impact on the parents. They enabled the parents to develop a better understanding of the factors for writing emergence. Parents adopted new behaviours following their training, in particular as concerns their role as educators.

The workers questioned believe that literacy education interventions should be geared toward the family as a whole, and that they should be progressive, gratifying and based on self-esteem.

Although the research studies cover several aspects of family literacy, the parental skills (mother and father) aspect could be better documented, in particular as concerns parent-child relationships and parent-child learning-related activities. There is little information describing training programs that include families.

3.8.5 List of Research Studies on the Topic of Family Literacy

Bittar, Muriel; Lemay, Jean; Blain, François. *Recherche exploratoire. Projet 'Prévention de l'analphabétisme'. Résultats d'une recherche menée auprès de parents d'enfants d'âge préscolaire et d'intervenants oeuvrant auprès de la famille à Longueuil*. Commission scolaire Jacques-Cartier, Longueuil, Quebec, 1995.

Coalition francophone pour l'alphabétisation et la formation de base en Ontario. *A Study of the Impact of French-Language Family Literacy Programs on Francophone Families in Linguistic Minority Settings in Ontario*. (Project in progress).

Couture, Rosanne; Lavoie, Natalie; Lévesque, Jean-Yves. *Programme expérimental de développement de compétences auprès de parents qui éprouvent des difficultés à lire et à écrire, dans des situations d'éveil au monde de l'écrit chez leurs enfants d'âge préscolaire: rapport final*. Les Éditions Appropriation, Rimouski, Quebec, 1998.

Drolet, Nathalie; Legros, Janine; Roy, Sylvie. *L'écho d'un silence. Recherche-action sur les parents peu scolarisés*. Groupe Alpha Laval (Association) and Entraide Pont-Viau/Laval-des-Rapides (Association), Laval, Quebec, 2001.

Filion, Esther. *La communication entre l'école et les parents peu scolarisés: un pont à bâtir, un lien à définir: rapport de recherche*. Atelier des lettres, 2003.

Garnier, Catherine-Michèle. *Systèmes de représentations sociales de l'alphabétisme d'adultes analphabètes et d'adultes en démarche d'alphabétisation*. Montréal, Quebec, 2004.

Kanouté, Fasal. *Les parents de milieux défavorisés et l'accompagnement scolaire de leurs enfants*. Comité de gestion de la taxe scolaire de l'île de Montréal, 2003.

Lavoie, Natalie ... [et al.]. *Développement de compétences parentales et émergence de l'écrit chez les enfants: rapport final*. Éditions Appropriation, [Rimouski, Quebec], 2000.

Lyonnais, Denis. *L'impact des ateliers sur les compétences parentales sur l'amélioration de l'accompagnement parental et sur la réussite éducative de l'enfant*. (Project in progress).

3.9 Learners and Educators

This section deals with adults as learners and educators, and with the relationships between these two groups of people. Classifying the records by topic made it possible to index fifteen (15) documents that fall into this section. Although most of them are from Quebec, three research reports are from Ontario. Half of the publications are from university settings: Université du Québec à Montréal (3), Université de Montréal (1), Université du Québec à Hull (1), Université du Québec à Rimouski (1) and Laurentian University in Ontario (1).

The strong university presence is due to five master's theses (Audet, 1997; Couture, 1997; Gauthier-Frohlick, 1997; Vallières, 1998; Vadnais, 1999) and one doctoral dissertation (Ariste-Sanou, 1998). Only the master's thesis by Gauthier-Frohlick (1997) was produced in Ontario; the other texts are from Quebec.

The years that were most profitable to the topic of learners and educators were 1997, 1998 and 1999, which yielded 60% of all of the publications. Of the 15 works, one stands out from the rest due to its research "subject": Ariste-Sanou (1998) actually deals with women's literacy education in Burkina Faso.

The topic *learners and educators* concerns aspects relating to the individuals involved in literacy education, and most of the research studies on this topic are based on a relatively small sample of people. This is not the case for Girard (1994), however, who collected data from 550 people, Gauthier-Frohlick (1997), with a sample of 60 subjects, and Lefebvre (1996), who has 40.

The records in the RÉCRAF index that were classified under this topic may be sub-divided into to sub-topics: "educators" (3) and "adults as learners" (12).

Figure 3.9 – Distribution of research studies on the topics of learners and educators by year (N=15)
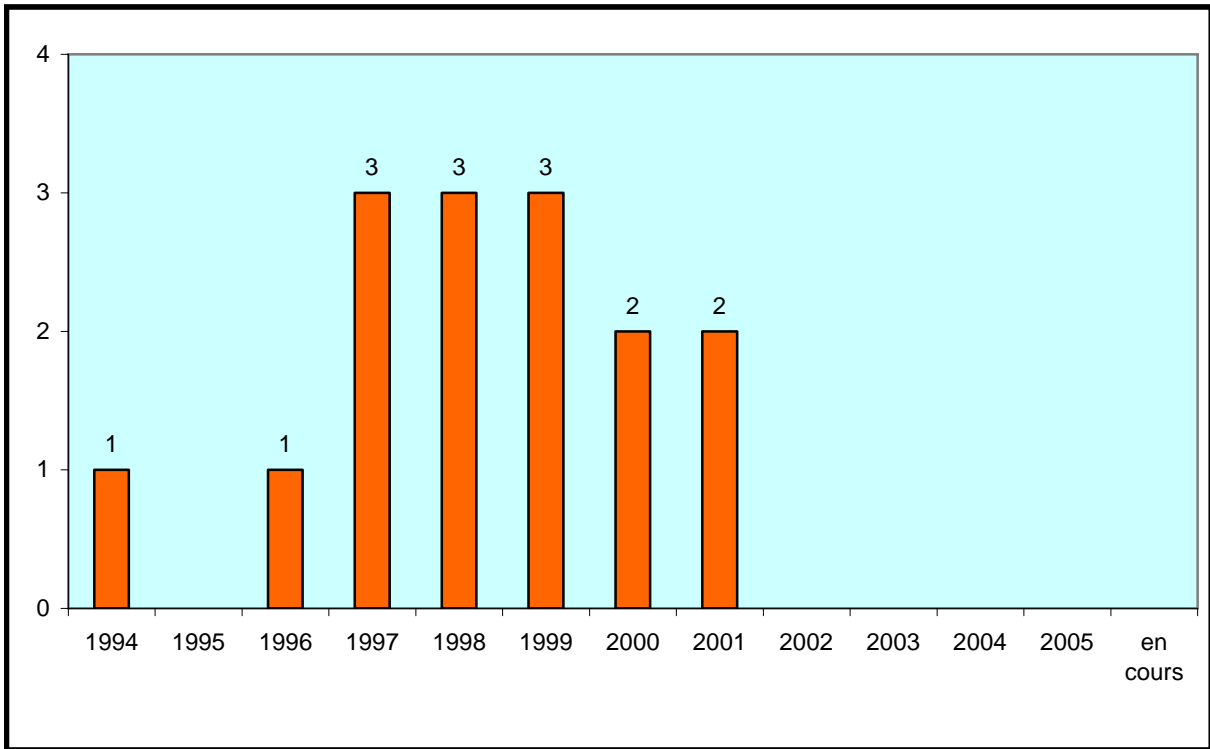
3.9.1 Educators

Only three documents deal with educators. Bessette (2000) and Lurette (2001) attempted to determine the training parameters and approaches used during literacy education activities. These action-research studies pushed workers to self-assess their practices through semi-directed interviews with small groups (6 and 9 people).

The results of these action-research studies converge: whether they work in Ontario (Lurette, 2001) or Quebec (Bessette, 2000), workers have improved and adapted their andragogic practices to their clientele. These types of approaches do, however, require that workers have the time needed to experiment, set up supervision and monitoring, and take advantage of the experience and skills of practitioners (Lurette, 2001).

The third research study about educators focuses on the working conditions at an adult education centre in an urban setting. The authors (Messing and Seifert, 2000) describe the situation that was noted after over sixty hours of in-class observation and several group interviews. They note the uninviting conditions in which these teachers work, with their precarious status and the ever-present stress of losing their jobs. Moreover, given the flimsiness of their contract, the teachers are in

constant competition with one another, which has an adverse effect on solidarity and mutual aid between co-workers. By way of conclusion, the authors suggest possible solutions involving both the various levels of government and the management of the school board and union concerned.

Of all the documents indexed in the RÉCRAF database, only the three mentioned above deal explicitly with educators; however, there are some data in works included in other topics.

3.9.2 Adults in Literacy Education

While the research studies on educators were published in 2000 and 2001, the research studies dealing with learners are almost exclusively from 1997, 1998 and 1999. These works differ from the data gathered on adults in topics 1 and 2 in that they focus on more personal aspects: their motivations, perceptions and life stories. In order to gather their data, eleven of the twelve documents found here used semi-directed or individual interviews or group discussions.

One research study conducted in 1999 (Veltri and Van Winckel, 1999), in Ontario's Peel region, among young Francophone dropouts reveals, first, what prompts young people to quit school. That study, which is based on a review of the literature, revealed that the presence of a disability or difficult family situation and insecurity are the main dropout risks, which supports the research reports by Vadnais (1999) and Guérard, Rathé Chartier, Leblanc, Ferland, Lalancette and Bournival (1999). The four young dropouts encountered during the group discussion in Peel region also mentioned that they did not fit in with the school setting. They also emphasized that they felt personally belittled.

Confirming the results of the research by Veltri and Van Winckel (1999), other research studies stress the psychological impact of illiteracy on self-esteem and self-confidence (Audet, 1997; Couture, 1997; Gauthier-Frohlick, 1997; Ariste-Sanou, 1998; Deniger and Roy 1998; Guérard *et al.*, 1999; Vadnais, 1999). De Coster (2001) also refers to these psychological impacts and states that they have serious repercussions on learners' progress by increasing their stress level, limiting their learning strategy and handicapping their motivation.

A research study conducted as part of a master's thesis by Gauthier-Frohlick (1997) among thirty learners and thirty non-learners suggests a psychological divide between the two groups of interviewees. The researcher submits that illiterate people who do not undertake a training process are embarrassed, fear being ridiculed and put themselves down compared with others, especially those who are able to read and write. Individuals who have undertaken a literacy education process display more determination and self-confidence. It is often because they are seeking these psychological benefits that people enrol in literacy education activities. Some research studies also suggest that many learners engage in training activities in order

to be able to help their children along their educational pathways (especially women) (Audet, 1997; Couture, 1997).

In her research report, De Coster (2001) highlights the fact that learners need to acquire greater independence and to break out of their isolation, even if the learning process is slow and difficult. The author identifies the limited repertoire of learning strategies as an obstacle to learning: instinctive approach, trial and error, mechanical and repetitive behaviours, etc.

A good many illiterate people are also motivated by the desire to improve their socioeconomic status (Guérard *et al.*, 1999). However, several research studies cast a shadow over literacy education by noting only very minimal economic gains following training (Audet, 1997; Ariste-Sanou, 1998; Deniger, Roy, 1998).

Although the research is on women in Burkina Faso, Ariste-Sanou (1998) clearly reveals the importance of having the tools to make the most of the knowledge acquired during literacy education activities, failing which it may fade over time. This situation is even important for people living in a minority setting, as is the case for Francophones in Ontario (Veltri, Van Winckel, 1999).

Adults who have been unable to overcome illiteracy retreat into themselves more and more, and refuse to talk about their reality as illiterate people as the years go by (Vallières, 1998). According to the author of this participatory research report, senior citizens and the very old seem to want to remain intellectually active and train their memories. At least this is what emerges from the meetings held with six seniors.

A study conducted in 1994 reveals that despite qualified socioeconomic success, most former learners appreciate the literacy education they received: 84% of the people consulted considered the training "moderately" to "very" useful (Girard, 1994). Deniger and Roy (1998), for their part, put forward an 80% satisfaction rate.

The study by Lefebvre (1996) deals with how literacy education participants perceive their participation and involvement in the democratic space of their RGPAQ-member grassroots community literacy education group. The research reveals the profile of learners: the relationship between their age, their involvement and their self-esteem, their living conditions — most are income security recipients — and the skills learned as a result of their involvement in the group (resourcefulness, organizational skills, sense of responsibility, team spirit, feeling of belonging and development of self-esteem). The types and places of involvement vary: although many get involved in the literacy education organization, others choose to do it in places where their participation requires further learning.

A few avenues of research are suggested, in particular: what impact does an absent father have on children's academic success? (Audet, 1997), or what impact are new technologies having on the experiences of individuals who have difficulty reading and writing?

3.9.3 Summary of Topic 9: Learners and Educators

The topic on adults as learners or educators includes fifteen (15) records, eleven (11) of which are from Quebec and four (4) from Ontario. Half of that research was published in a university setting, including five (5) master's theses and one doctoral dissertation. All of the documents are on mainly qualitative research based on individual and telephone interviews, with or without discussion groups. Moreover, of the fifteen research studies, seven (7) deal mainly with female "subjects".

The fifteen (15) records may be divided into two groups: three (3) are on "educators" and the other twelve (12) focus on "adults in literacy education". Two of the three records on educators - the subjects are mainly women - deal with action-research on training practices. The self-assessments and reflections generated by those research studies contributed to practices being reviewed and adapted to the needs of learners. The third research study highlights the precarious working conditions of educators and the severe stress they are under as a result: governments and school board management should take note of this and take the required corrective measures.

The second group of records contains twelve (12) reports and focuses on learners. They paint a picture of the population, stressing the reasons why young people drop out (not fitting into the school system, lure of jobs, lack of support from family and friends, disability, etc.); adults' motivations for enrolling in a literacy education course (independence, supporting a family, children's education, self-esteem, desire for better pay, breaking out of isolation); and the specific traits of the elderly (stimulating their memory, breaking out of isolation, keeping occupied). Although several research studies seem to highlight "occupational and social" motivations for learning to read and write, such as getting a better job and income, others deem the gains to be very minimal. Everyone agrees, however, on the psychological benefits. Before taking part in literacy education activities, many learners felt intimidated by those with higher literacy skills, lacked self-confidence, were afraid of being ridiculed, etc. Their training clearly helped them from this perspective.

It would be possible to conduct studies on the experiences and career paths of educators; on their role, beliefs and perceptions; and on learner-educator relationships and their impact on learning. Finally, it should be noted that no work has been done on researchers and research groups interested in adult literacy.

3.9.4 List of Research Studies on the Topic of Learners and Educators

Ariste-Sanou, Clémence. *Alphabétisation réussie: les représentations des femmes rurales néo-alphabètes du Burkina-Faso*. Université de Montréal, Montréal, 1998.

Audet, Louisette. *Les coûts économiques de l'analphabétisme chez les femmes, mères de famille, et les bénéfices de l'alphabétisation*. Université du Québec à Montréal (UQAM), Montréal, Quebec, 1997.

Bessette, Sylvie. *Élaboration d'une méthode d'analyse de pratique permettant la recherche et l'analyse qualitative de données expérientielles par des formateurs et des formatrices*. [s.n.], Sherbrooke, Quebec, 2000.

Couture, Rosanne. *La signification que des personnes dites analphabètes accordent à leur vécu*. Université du Québec à Rimouski (UQAR), Rimouski, Quebec, 1997.

De Coster, Élise (coord.). *Regards sur l'apprentissage: recherche-action sur l'apprentissage chez des adultes en démarche d'alphabétisation dans un contexte d'alphabétisation populaire*. Carrefour d'éducation populaire de Pointe St-Charles, Montréal, 2001.

Deniger, Marc-André; Roy, Gilles. *Le parcours des adultes inscrits en alphabétisation dans les commissions scolaires de l'Île de Montréal: sens et effets de leur expérience en "alpha": rapport d'enquête sociologique*. [Table de concertation en alphabétisation de l'Île de Montréal], [S.l.], 1998.

Gauthier-Frohlick, Denise. *Conscience de l'analphabète francophone: analyse qualitative*. Laurentian University, Ottawa, Ontario, 1997.

Girard, Hélène. *Que sont devenus les apprenants qui ont fréquenté la CLÉ? Enquête effectuée auprès des adultes inscrits en alphabétisation 1983-1993*. Centre la CLÉ (Alma, Quebec, Association), Alma, Quebec, 1994.

Guérard, Ghislaine... [et al.]. *Apprendre à lire... apprendre à s'aimer... Stratégie d'insertion sociale des participants(es) du centre d'alphabétisation d'Un Mondalire: recherche-action auprès des participants(es) du centre d'alphabétisation Un Mondalire*. Mondalire (Association), Montréal, Quebec, 1999.

Lefebvre, Françoise. *Une recherche participative qui fait réfléchir*. Regroupement des groupes populaires en alphabétisation du Québec (RGPAQ), Montréal, Quebec, 1996.

Lurette, Donald. *Barrières à l'apprentissage en alphabétisation: comment adapter nos pratiques au développement professionnel des formatrices: rapport de recherche-action*. Centre d'apprentissage et de perfectionnement (CAP), Hawkesbury, Ont., 2001.

Messing, Karen; Seifert, Ana Maria. *«On est là toutes seules»; Contraintes et stratégies des femmes à contrat précaire dans l'enseignement aux adultes*. Université du Québec à Montréal (UQAM). CINBIOSE, Montréal, Quebec, 2000.

Vadnais, Jacqueline. *Types de motivation et parcours de vie chez un groupe de femmes engagées sur une base volontaire dans une formation en alphabétisation*. Université du Québec à Montréal, Montréal, 1999.

Vallières, Thérèse. *Vers l'élaboration et la mise en oeuvre d'activités d'alphabétisation avec les aînés du troisième et quatrième âges*. Université du Québec à Hull, Hull, Quebec, 1998.

Veltri, Anna; Van Winckel, Fred. *Profil des jeunes décrocheurs francophones (de 15 à 24 ans) de la région de Peel 1999*. [s.n.], [S.l.], 1999.

4. CONCLUSION

Since it was created in 1994, the RÉCRAF has become an important hub for everyone working on adult literacy and literacy education. The database, which went online in 1999 thanks to the sustained work of the CDÉACF, is now an essential source of references. It cannot help but grow in importance and develop international renown if funding sources continue to support efforts to promote adult literacy in Canada.

There are two main aspects to the summary work that has just been done: a summary overview and a thematic overview. The *dynamic summary overview* presented at the end of the first part reiterates that the 153 research studies indexed between 1994 and mid-June 2005 were the work of 214 authors, who conducted their studies in Quebec in 62% of the cases and in Ontario in 28% of the cases, with all of the Canada-wide publications being included in that province. The other provinces contributed 6% of the publications: British Columbia (3%), New Brunswick (2%), Manitoba (1%) and 4% of the output is mixed between Canada and France.

Of that research, over half is qualitative, one quarter is quantitative, and the remainder is mixed. More than two out of five research studies were conducted in the community setting, which makes it the most prolific sector. Next is the educational setting, which accounts for over one third of the output, and finally the government setting, which produced less than one quarter, but which conducted all of the large-scale quantitative research, thereby offering everyone conducting research data on which to rely. Governments, mainly through the NLS and IFPCA, financially supported most of the research. This indicates the impact of the government will to improve Canadian literacy levels. The summary overview also sets out the chosen topics. In order of abundance, the count by topic stands as follows:

1. Accessibility and retention: 36 (23.5%);
2. Adult literacy: 29 (19%);
3. Literacy and employment: 29 (19%);
4. Learners and educators: 15 (9.8%);
5. Literacy and technology: 13 (8.5%);
6. Literacy, numeracy and basic skills: 12 (7.8%);
7. Literacy and health: 9 (5.9%);
8. Family literacy: 9 (5.9%);
9. Literacy and Aboriginal peoples: 1 (0.7%).

The *topical overview* takes up and deals with the research classified in each topic. More often than not, each topic is divided into sub-topics for ease of processing the information, and offers a nuanced picture of the research on literacy education and literacy. After analysis, each topic ends with a summary, and interested readers may refer to it. Elements of convergence and specific data about the literacy level of

Canadians emerge from the body of research work: two out of five adults over the age of 16 living in Canada have a low literacy level, men slightly lower than women. The situation gets worse, however, for Francophones living in a minority setting; in that case, three out of five adults are at the lowest levels. For immigrants, a higher literacy level would encourage integration into the host society.

As we have seen, literacy levels 1 and 2 are the lowest levels for the comprehension of narrative texts, schematic texts and texts with quantitative content, and the individuals at those levels are described as having a low literacy level. These people's reading skills are considered to be too poor to enable them to follow the progress of and adapt to changes in the knowledge society. Level 3 is the standard adopted in many countries as the minimum threshold required for full participation as a citizen.

In this sense, efforts are being and must be made to improve the level of *adult literacy* in Canada in order to support the country's growth and ensure that it remains competitive. Beyond describing the state of literacy in Canada, what most concerns the government and a good many organizations is the connection between literacy and employment. On this topic, *literacy and employment*, the works included in the RÉCRAF clearly show that there is a definite connection between employment and literacy skills. Those skills are essential in most jobs as well as in job advancement and progression. They even offer a higher degree of correlation than education when comes the time to study the connections with job market participation, remuneration and the likelihood of one day being economically disadvantaged.

The employment situation of individuals with low literacy levels is of concern. Older people are difficult to reach, are seldom the subject of training activity and do not seem to see the need to improve their basic skills. Managers and professionals are actually the ones who receive the most attention and take part in the most activities. Illiterate people, for their part, use a large number of strategies to conceal their inability to read. Fear of losing their jobs, fear of being laughed at, and fear of having their chances for advancement compromised are some of the obstacles encountered by training programs and activities for this clientele.

However, a low literacy level has serious consequences for most adults: low self-esteem, lack of self-confidence, casual jobs, low wages, inability to understand written information, dependence on the television for information. Quite often, these adults depend on State support and are thereby excluded and marginalized. As parents, they have difficult relationships with their children's school and feel powerless to supervise them. *Family literacy* is becoming a necessity in order to avoid passing on a low literacy level to children. The same applies to *health*. A low literacy level hinders the ability to understand and manage an illness, especially as concerns taking medicine as prescribed or following a diet, whether for the adult him- or herself or for a loved one.

Reaching adults with low literacy levels is becoming an important leitmotiv. In

many cases, the activities offered by grassroots community groups best meet the needs of adults; these groups no doubt make adults feel more respected and less threatened, since many have had school experiences riddled with frustrations and failures. The issue of *accessibility and retention* is vital, since the affected adults must be convinced to take part in training activities, whether in a grassroots community setting, in an educational setting or in an employment setting. Information aimed at them must also be written in plain language so that they can understand and use it.

The research work on *literacy, numeracy and basic skills* reveals that adults who enrol in a basic skills development course experience increased self-esteem and greater self-confidence, are more resourceful, are better able to manage their daily lives and develop new networks of friends and acquaintances. Once they embark on training, these adults prove to be open and adopt a positive attitude to reading and writing.

Technologies could also be used more, since many *learners* perceive them to be a stimulating source of learning, whereas *educators* use them as a source of information. They are actually an information medium for all adults and make it possible to reach groups that would be difficult to reach otherwise, if only because of certain unique traits of the adults concerned: illness, distance, disability or simple embarrassment.

These few lines in conclusion reveal just how information-rich the RÉCRAF database is. After nearly twelve years of research, a substantial body of data has been updated. Very reliable quantitative data are available that provide a basis for more qualitative research on specific knowledge.

Despite this wealth of information, a great deal of research work remains to be done. Aboriginal people and educators are relatively overlooked, and little information about them is available. The learning process of illiterate adults or adults with low literacy levels is also under-documented, and how this learning process differs from that of more educated people is unknown. Little data is available on the best programs, in particular in the prison setting, workplace or minority setting. Numeracy remains an obscure aspect, and basic skills assessment methods a dimension to be developed. Moreover, although the connections between literacy and remuneration have been clearly established, and although companies win when their employees improve their literacy level, few works dealt with continuing education for workers, and it is unknown whether the adults involved reaped a financial benefit from the activities they engaged in.

It will be up to researchers to consolidate the current knowledge base in order to develop a better knowledge and understanding of adult literacy and to intervene better to promote an increase in the population's literacy level. To that end, Canada can count on a critical mass of individuals and organizations that have already shown their concern about the literacy of the country's adults through the research indexed by the RÉCRAF and available from the CDÉACF.

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or www.nald.ca/ftext/sna/ialsf/ialsrepf/backgf.pdf

APPENDIX 1: LIST OF RÉCRAF COMMITTEE MEMBERS

Giselle BOISVERT is an educational advisor in adult education for the **Commission scolaire de Montréal.** She is also the author of a book on the introduction to reading titled "Éveiller l'enfant à l'écrit, de la naissance à l'école", which was recently published by Éditions Hurtubise HMH.

Martine BOUCHER has been a coordinator with the **RÉCRAF** since 2003. She is also working as a consultant on many projects closely related to literacy.

Manuel CISNEROS (Institut de coopération pour l'éducation des adultes, ICÉA) is responsible for the new technologies and adult education and knowledge and skill recognition component of the ICÉA.

Isabelle CLERC (Université Laval) is a communications professor and director of the group **Rédiger** for redactology researchers. Their work focuses on the production and reception of practical texts and on writing in plain language.

Linda HACHÉ was a literacy educator for many years. She is currently a project officer for the **Fédération d'alphabétisation du Nouveau-Brunswick (FANB).**

Margot KASZAP is a professor in the Faculty of Education at **Université Laval.** She has supervised and written several research reports on the relationship between literacy and health. She is currently working on setting up a Canadian Health Research Network with a team of five Canadian researchers.

Yvon LABERGE is a consultant in the fields of literacy education and education. He is currently the coordinator of **Eduk in Alberta**, whose mandate is to offer continuing education services to Alberta's Francophones and Francophiles. The organization has developed a literacy education component.

Normand LABRIE is associate dean of research and graduate studies at the **University of Toronto**. A researcher and CREFO member, his most recent research deals mainly with the relationship between bilingualism and literacy education.

Rosalie NDEJURU (CDÉACF) is the director of the Centre de documentation sur l'éducation des adultes et la condition féminine.

Chantal OUELLET is a professor in the Faculty of Education at **UQAM**. She is currently supervising research on essential skills training in Quebec for under-educated workers and is completing her doctoral dissertation on continuing education practices and the occupational performance of under-educated manufacturing sector workers who have engaged in basic skills training.

Charline VAUTOUR is a research officer and advisor on knowledge recognition for the project Service de Passerelles d'accès at the **Collège communautaire du Nouveau-Brunswick** in Bathurst. She is doing her doctoral dissertation on adult literacy.

Margareth ZANCHETTA is a nursing science professor at **Ryerson University** in Toronto, and her work relates to the connection between literacy and health. Her research studies have been published in French and in English. Her research interests include the cross-cultural representation of prostate cancer and its relationship with health-related learning.

APPENDIX 2: LIST OF ABBREVIATIONS

ICÉA   Institut de coopération pour l'éducation des adultes

CDÉACF   Centre de documentation sur l'éducation des adultes et la condition féminine

IFPCA   Initiatives fédérales provinciales en matière d'alphabétisation

LSUDA   Canadian Survey of Literacy Skills Used in Daily Activities (1989)

NLS   National Literacy Secretariat

NPHS   National Population Health Survey

RGPAQ   Regroupement des groupes populaires en alphabétisation du Québec

APPENDIX 3: LIST OF MAIN DEFINITIONS

Alphabetism   The ability to understand and employ printed information in daily activities, at home, at work and in the community, to achieve one's goals and to develop one's knowledge and potential (Statistics Canada*, 1996b, p. 2).

Literacy education	Basic teaching or learning of the written code (reading, writing, arithmetic), generally in a society's mother tongue, dominant language or language of use. Result of the foregoing (Legendre, 2005, p. 41)

APPENDIX 4: LIST OF RESEARCH STUDIES IN ALPHABETICAL ORDER BY AUTHOR

Antone, Eileen M.; McRae, Heather; Provost-Turchetti, Lois. *Literacy and Aboriginal*

Aboriginal Peoples: Best Practices, Native Literacy and Learning: Symposium: Summaries of Presentations: The Ontario Institute for Studies in Education, University of Toronto, Toronto, Ontario, Canada, May 3 and 4, 2002 / [editors: Eileen M. Antone, Heather McRae and Lois Provost-Turchetti]. University of Toronto. Ontario Institute for Studies in Education, [2003?].

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