Distance Education in Literacy Training :
for the Development of a Hybrid Approach

2008-2009

Secteur de la formation professionnelle et technique et de la formation continue

Québec

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Direction de l'éducation des adultes et de l'action communautaire

Research Action - Distance Education in Literacy Training: for the Development of a Hybrid Approach

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Introduction

In 1996, since the official founding of the Société de formation à distance des commissions scolaires du Q uébec (SOFAD), t he M inistère d e l 'Éducation, du Lo isir et du Sport (MELS), t hrough t he Direction générale de la formation générale des adultes (DFGA),[1] has provided meaningful impetus to the development of distance education in the field of general adult education.

Government Policy on Adult Education and Continuing Education and Training: a favourable context

Until v ery r ecently, t he distance ed ucation model i n Q uébec was applied i n an asy nchronous manner, which means that people would engage in training activities when they made their choice. The d istance e ducation model w as thus defined as "individualized t raining t hat al lows students to learn on t heir own, at t heir ow n pa ce, w ith minimum sc heduling an d t ravel l imitations, w ith se lf-sufficient teaching materials, access to various means of communication and support from resource persons."[2]

In the synchronous model, on-line training is increasingly perceived as a relevant choice, which is promoted by the development of information and communications technologies (ICTs) that can also be of use in the asynchronous model.

Despite a measure of resistance triggered by the changes associated with distance education, both the l iterature a nd pr actitioners in various countries are increasingly em phasizing the need f or developing distance education in various formats adapted to target populations.

In Québec, the adoption of the *Government Policy on Adult Education and Continuing Education and Training* in M ay 200 2 pr ovided a co ntext t hat w as par ticularly favourable to di stance educ ation i n literacy training. Encouraging the expression of the demand for learning and adapting services to the specific needs and situations of adults and communities constitute a key element of the Policy:

> Stressing t he expression of ne eds will l ead t o g reater f lexibility i n t he s upply of
> educational se rvices and t o co nsideration o f t he di versity of t ypes of se rvices and
> places where these services are provided, broadening the field of action in education
> and making it p ossible to r each pe ople in t heir i mmediate l iving an d working

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1. Since October 23, 2007, following the restructuring of the Secteur de la formation professionnelle et technique et de la formation continue, the Direction générale de la formation générale des adultes (DFGA), referred to in this document, changed its name to the Direction de l'éducation des adultes et de l'action communautaire.
2. Groupe de t ravail sur la formation à d istance, *Rapport 2003; Québec, MEQ working document.* This definition was taken from the Direction générale de la formation continue de l'Université Laval [translation].

environments. Thus the exploration and use of on-line learning activities and different forms of collaboration or partnership with businesses or the community should be maintained and increased.[3]

In this regard, according to the Policy statements, distance education is considered an attractive means of removing obstacles to access and barriers to participation:

> The potential of distance education should thus be developed; to do so, it will be important to pool our energies, act collaboratively, reach a critical mass of adults, modernize the supply of services and adopt an approach centred on the clients and their needs. In short, the supply must correspond to the real and potential demand.[4]

These statements converge on a primary concern of the Policy: increasing participation in basic education. In keeping with this concern, as DFGA consultants, we have conducted work on distance education in literacy training.

Background

The DFGA has been concerned with distance education in literacy for about a decade. However, initial experiences have not really followed through. Work on distance education in literacy training actually began with the creation of an initial working committee that examined the issue in 1999-2000. This committee formulated a series of recommendations, including the preparation of a review of practices and the literature to gain a better understanding of distance education in literacy training. A status report was published[5] in January 2002. The report emphasized that distance education practices were still undeveloped in the world of literacy training, particularly in Québec. It identified a few interesting initiatives, however, in English Canada and the United States. It also noted that the development of ICTs involved interesting possibilities in distance education and had sparked noticeable interest among literacy training practitioners around the world.

In Québec, distance literacy training has developed slowly, without supervision or much support. Although various independent or on-line learning activities using ICTs were established, distance education was an entirely undeveloped field. Of course, a few projects were undertaken (AlphaSim and Stéfi),[6] but despite encouraging results, the projects were not continued. The status report concluded that distance education in literacy training was not very developed in school boards and independent community-based literacy action groups.

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3. Québec, Ministère de l'Éducation, du Loisir et du Sport, *Government Policy on Adult Education and Continuing Education and Training* (Québec: Gouvernement du Québec, 2002), 5.
4. Ibid., 31.
5. Québec, Ministère de l'Éducation, du Loisir et du Sport, *La formation à distance en alphabétisation. État de la situation* (Québec: Gouvernement du Québec, 2002), 56.
6. The STEFI project was a multimedia experiment conducted in the Saguenay–Lac-Saint-Jean region, which included the implementation of the "À la recherche des mots égarés" with illiterate persons from September 30 to November 18, 1998. Three school boards in the region tested ALPHASIM, the distance education project using sound and images from 1994 to 1996.

Lastly, it recommended the drafting of a document to support the implementation of distance education in literacy training based on a hybrid approach. This approach would make it possible to define guidelines and an organizational mode specific to distance education in the context of a supply of service adapted to the needs and realities of people who have little schooling.

The proposed document

The DFGA then began work on preparation of the document "Distance education in literacy training: a hybrid approach." This document is intended to provide a platform for discussion and reflection for, on the one hand, the MELS and its partners and on the other hand, managers and literacy trainers in school boards and independent community-based literacy action organizations. The purpose of the DFGA document is to suggest orientations and provide guidelines for the implementation of distance literacy training activities. It recalls the Québec definitions of literacy training and basic education while formulating the issues of distance education in literacy training in Québec. It must also determine the principles and conditions for ensuring the relevance and quality of the development of the supply of literacy training services. Moreover it must describe the various formulas for this type of training, clarify the responsibilities of the different actors, present the main resources and lastly, outline future prospects

After preparing the document, the DFGA deemed it necessary and prudent to verify its relevance and feasibility with a number of persons responsible for distance education in school boards and community-based literacy action groups. It entrusted us with this responsibility.

Research objectives

In 2001, we undertook research with the main objective of verifying and improving the document "Distance education in literacy training: a hybrid approach" while at the same time expanding our knowledge of literacy training in the form of distance education.

Our research-related activities put us in contact with emerging and ongoing experiments, and allowed us to meet with researchers and people who are keenly interested in this issue, explore a much larger collection of documents compared to the situation at the outset of our work in the field, better define the organizational conditions for distance education in literacy training activities, collect a few aspects of the evaluation of the effects of these activities on adults with little schooling who have experienced more advanced experiments and lastly, consider some avenues of development. In the following pages, we will report on our exploration.

Hypothesis submitted

As the government of Québec states in the *Government Policy on Adult Education and Continuing Education and Training* and clearly formulates in the accompanying action plan, distance education is an interesting avenue that should be developed in order to improve the supply of services in response to the needs and the demand in different environments. In the field of literacy training,

hybrid training would appear to be the best way of responding to the needs of distance education, taking into account the characteristics of the target population.

However, the following conditions appear to be essential:

1) an adapted financing mechanism that involves developing budgetary regulations based on the necessities and the characteristics of distance education

2) training or professional development for teachers as well as the implementation of resources required to support them in their distance education initiatives

3) support and coaching suited to adult learners

4) an effective model providing easier access to computer materials and any other materials necessary for distance education in literacy training activities

5) the establishment of a network and the implementation of a partnership to manage distance education activities and the sharing of resources to be made available to the target population

6) the active participation of all actors involved in this issue in order to develop distance education in literacy

This research report is divided into three sections: the first outlines the methodology used and the main processes followed; the second section deals with distance education in literacy training (explanation of the chosen concept, presentation of its main advantages and elements of knowledge justifying its importance); lastly, the third section provides an explanation of the document "Distance Education in Literacy Training: A Hybrid Approach."

Distance education and literacy training: Main phases of work

The following summary table presents the main phases in the DFGA work on literacy training and distance education, from 1999 to 2006.

Distance education in literacy training: Main phases of work

Establishment of a working committee
1999-2000

Examination of the various facets of distance education in literacy, exploration of current experiments and related documentation.

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Publication of the report *La formation à distance en alphabétisation, état de la situation.*
Winter 2002

Main findings: practices and tools are scattered, experiments in distance education in Québec suffer from a lack of supervision. However, there is greater interest on the part of managers and literacy trainers in distance education associated with the rise of information and communications technologies.

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Preparation of the first version of the document "Distance *Education* in Literacy Training: A Hybrid Approach."

Definition of guiding principles and guidelines for supporting the creation of distance education activities in school boards and community-based literacy action groups.

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Research on the development of distance education in literacy training. (First phase 2003).

Exploration of experiences in distance education in literacy training in school boards and community-based literacy action groups, meetings with managers and literacy trainers who are interested in this issue in both networks, based on the DFGA document.

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> *Progress report on the study of the development of*
> *distance education in literacy training.*
> December 2003

Main findings: a sometimes negative perception of distance education for adults with little schooling, the advantage of a hybrid approach to distance education for adults with little schooling, the training needs of teachers in distance education, the necessity of investigating funding formulas better suited to distance education in literacy training, the possibility of establishing a national network, the need to continue the study in order to complement the development of ongoing initiatives and those that emerged during the study.
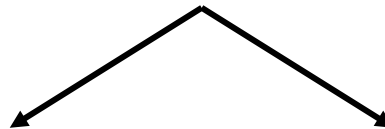
| Completion and publication of the research *Distance Education and Literacy Training: For the Development of a Hybrid Approach.* February 2006 | Publication of the *document "Distance Education in Literacy Training: A Hybrid Approach."* March 2006 |

1. Methodology

1.1 A qualitative approach

The v ery nat ure of our r esearch, constantly evolving and ex ploratory, and our t opic, i .e. t he development of distance education in relation to literacy training and the main guidelines that must frame it, naturally led us to adopt a qualitative approach. It was important to us to understand and document the implementation of a distance education project: the relevance of distance education for the field of literacy training, the principles that must underpin the emergence of such a pr oject and the conditions essential to its success as well as the effects for the various targeted parties. However, while research and testing of initiatives specific to distance education are experiencing a degree of growth, they are marginal and few in number. Since this field of study is still relatively new, we be lieve i t important t o ex amine t hese i nitiatives and t o bu ild on t hem while at t he s ame t ime enriching our knowledge of the field.

1.2 Research: Phase one

The first phase of our research consisted in conducting a su rvey of organizations to discover their interest an d t heir exp ertise i n di stance educ ation and t o gat her t heir co mments concerning t he document "Distance Education in Literacy Training: A Hybrid Approach." To this end, we met with ten peo ple f rom v arious school boards and independent co mmunity-based l iteracy act ion organizations who were interested in distance education.[7]

In addition, the Eastern Townships School Board, involved in a project linked to distance literacy training, demonstrated its desire to collaborate in our research.[8] The person in charge of this project at the school board committed to completing a record sheet[9] concerning this school board's project and the DFGA document.

An independent literacy action organization, Ludolettre, also demonstrated an interest in taking part in t he st udy.[10] This organization w as visiting i ndependent co mmunity-based l iteracy act ion organizations (ICLAOs) i n or der to ev aluate h ow t hey r eally use d i ts site and i ts proposed on -line literacy t raining e xercises. T he p erson i n ch arge t hus committed t o gat hering an d c ompiling t he reactions of t he or ganizations t hat w ere met w ith r egard t o d istance education and t he DFGA document.[11] Through Lu dolettre's visits, par ticipants of t he se ven i ndependent co mmunity-based literacy action organizations took part in our study.

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7. Appendix 1 contains the list of the people encountered and the data collection tools used in our research, including the interview questionnaire that was used to structure these meetings (tool 1).
8. During the same year, the Eastern Townships School Board tested a literacy training project that was partially conducted at a distance.
9. The record sheet is in Appendix 1 (tool 2).
10. In recent years, the Ludolettre group designed a Web site containing literacy training exercises.
11. The record sheet is in Appendix 1 (tool 3).

Officials at the Eastern Townships school board and at Ludolettre also shared their opinion of the DFGA document, based on their experience.

In addition to the information we collected for our study, which proved enriching, we also learned about the most recent experiments in distance education in literacy training, or experiments involving facets of distance education, that were initiated by school boards or ICLAOs. For this reason, we suggested that the DFGA add a second phase in our research that would take into account the results of several distance education initiatives, which would make it possible to verify in a more relevant way, its document "Distance Education in Literacy Training: A Hybrid Approach."

1.3   Research: Phase two

During the second phase of our research, we met with four literacy training organizations through individual interviews[12] on four occasions, with the Laval and Chemin-du-Roy school boards and the ABC Lotbinière and Centre des lettres et des mots (CLEM) organizations. At these interviews, we addressed elements of the DFGA document in light of each of the stages of their projects. The interviews were semi-directed, according to a planned framework: the persons interviewed answered specific questions, but we also invited them to make their own comments. In addition, each organization filled out the record sheet.[13]

These meetings considerably enriched our research. They allowed us to make concrete observations of the reality of implementing a distance education project or a similar initiative and thereby verify and supplement the main sections of the DFGA document. Note that although the four projects we examined showed a number of similarities and common facets, they are all different and were at different stages of development at the time of the meetings. However, these projects, still new, did not allow us to evaluate the effects of distance education on adults; this aspect will therefore have to be analyzed and documented in coming years.

Moreover, we met with Jocelyne Martin, researcher at the Université du Québec à Montréal,[14] who participated in the Commission scolaire de Laval project and who is interested in the development of distance education, to discuss the interest of distance education for literacy training. We also collected her comments about the DFGA document. In particular, this researcher confirmed the need for a conceptual framework in the distance education field. She also addressed the necessity for attitudinal change with respect to the implementation of distance education models, both in terms of the andragogical process and training tools.

A brief description of the four projects is presented below.[15]

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12. The questionnaires are in Appendix 1 (tools 4 and 5).
13. The record sheet is in Appendix 1 (tool 6).
14. We met with Jocelyne Martin, lecturer at the Université du Québec à Montréal (Faculté des lettres, langues et communication), on December 6, 2004.
15. An exhaustive description of each of the projects was produced and provided by the promoting organizations (see Appendix 2).

During 2004-2005, the **Centre d'éducation des adultes du Chemin-du-Roy, in the school board of the same name,** worked on setting up a distance education project for persons with literacy training needs. This is a complete distance education system in this field. The team was mainly interested in the resources required to ensure the success of a project that would reach more adults who are unable to participate in literacy training programs in a centre. It examined training platforms, designed a training model, compiled and selected material and implemented a literacy training program specific to a target population in the region of Louiseville. This program is addressed to an adult population over age 25, at literacy levels 3 and 4. The project will be tested during the year 2005-2006. We should specify that the model is multimodal, in other words, it uses both technological and traditional methods. It also makes provision for supervision and communication strategies that simulate a classroom context. Thus it makes it possible to adapt the literacy training program to the limitations of adults and to better serve the target population. Lastly, in order to ensure the sustainability of the project, the partners' research is also included in the promoters' main concerns.

The **Commission scolaire de Laval** created the *Accroche* on-line literacy training site. It mainly offers on-line training for adults who have difficulties with reading, writing and arithmetic. The training is carried out exclusively on the *Accroche* Web site with the assistance of an "on-line teacher" and can lead to recognition or an attestation from the school board. After some years of development, the site is currently operational. Following a "validation-training" tour with 151 trainers specialized in literacy training, in collaboration with the Réseau pour le développement des compétences par l'intégration des technologies (RECIT), the school board will work on improving the site and its components and expanding its use among other Québec literacy training organizations. Note that this project is not a distance education in literacy training system as such, but its components and the planned adaptations will make it possible to use it in the context of an initiative in the field.

The independent community-based literacy action organization **ABC Lotbinière** developed a distance education system that relies on an on-line training site providing individualized coaching adapted to adult learners. The organization designed its system based on a customized training approach. The project considered the various aspects of distance education adapted to a population with little schooling: reception meetings, offer of personalized support and group meetings, design of material specific to the goals of individuals, evaluation and self-evaluation, etc. The project was tested with people frequenting the organization. In fall 2005, the service was made available to the entire population of the region.

Lastly, the **CLEM** carried out a distance telecollaboration project with people who have little schooling and in certain cases, people with mental health problems. Strictly speaking, this project is not a distance education initiative, but the platform created and the testing conducted would be easily transferable to such a context. The project first of all presented the various stages of implementation and adaptation of distance collaboration tools, taking into account the educational process (project-based instruction). Second, it described the advantages and disadvantages of distance collaboration in the case of the main actors targeted (participants, literacy training workshop facilitator team) and the instructional approach used. The CLEM research report indicates that

although distance education and telecollaboration are different in their educational approaches, they could complement one another in a harmonious way and possibly form a hybrid model.[16] This is why we think it relevant to include this initiative in our research.

Note that these projects stand out because of their innovative nature and their openness. In this regard, they do not correspond to conventional distance education, but rather to a mixed approach to open, distance education which more closely fits with the reality of literacy training. All of these projects integrate information and communications technologies.

1.4   Literature review

Although the literature dealing with the issue of distance education in literacy is rather limited, examining it allowed us to better understand evolution in the field in recent years and more generally, basic education.

Thus, government and observatory reports on adult education in various countries show that distance education interests managers and officials of organizations providing continuing education services, particularly in literacy training. In Québec, through the *Government Policy on Adult Education and Continuing Education and Training,* in Canada and elsewhere, the development of distance education for adults appears to have good potential as a means of increasing the participation of adult learners in training.

The literature covering the integration of ICTs and on-line or computer-assisted training is abundant in the field of adult education. Certain documents deal more specifically with the integration of ICTs in literacy training. It should be noted that this theme cannot be dissociated from distance education because the two facets are closely related.

Few studies specifically address distance education in terms of literacy training. Two such studies enriched our findings: one deals with an experiment in distance education with people who have little schooling in prisons in the south of France,[17] and the other one (Alpha*Route*) deals with an experiment with on-line training and distance on-line training. These two studies have the advantage of presenting findings taken from completed, analyzed experiments that deal specifically with the effects of this approach on adult learners. However, we should specify that they both examine small samples over short periods of time (a few months) and that generalizable conclusions cannot be made without more extensive studies and verification.

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16. Mario Breton, La collaboration à distance, un outil stratégique en alphabétisation. Rapport de recherche-action (Montréal: Centre des lettres et des mots (CLEM), 2005), 3.
17. Joëlle Arnoldo, L'intégration des technologies de l'information et de la communication dans les formations d'adultes en situation d'illettrisme: analyse des usages pour un service d'information stratégique des formations de base (SISFOBASE), thèse de doctorat, l'Université de droit, d'économie et des sciences d'Aix-Marseille, 2000, 351 p. This thesis generally addresses the integration of ICTs in training for people with low literacy levels. However, a significant part of it deals more specifically with the use of ICTs in a model of distance education in prisons. (See pp. 157–327).

2. Distance education and literacy training

In general, we can assert that few people are indifferent to distance education in literacy; some are very enthusiastic, while others are very skeptical. Thus about half of the people we met appeared to be very excited by a given project, while others did not really believe it would be successful.

2.1 The hybrid approach to distance education in literacy

The majority of the people who took part in our study felt that distance education could be a useful means of adapting to the needs of the adult population. Some respondents also view it as a way of allowing adults to access basic education. Some people think that distance education could have a triggering effect for pursuing a training process in a centre. However, given the target population, the challenge is considerable. Moreover, this is the consideration that gives rise to the most doubts. All the people we interviewed agree that those who use literacy training services need support and encouragement and would be unable or would find it difficult to undertake an independent training process. Briefly, the social aspect of training is very important in literacy training, and contact with the group and with the trainer is important.

The people we interviewed who appear to be the most skeptical about distance literacy training believe that the social aspect constitutes a virtually insurmountable obstacle. In contrast, the most enthusiastic interviewees talk about ways of overcoming this problem. For example, the ABC Lotbinière organization proposes several strategies to stay in touch with the group and the trainer: group meetings at the outset of training and several times during the process, timely, individualized support at home for the learner, open, accessible room, etc. The *Accroche* Web site of the Commission scolaire de Laval provides for the assistance of an "on-line teacher," while the Commission scolaire du Chemin-du-Roy project allows tutors large blocks of availability based on flexible schedules (evenings and weekends).

In fact, initiatives currently being tested show considerable flexibility and creativity in adapting to the reality of people with little schooling. They consider an "introduction to training" service to allow people to become familiar with the proposed learning method, to design a customized training project and to establish contacts with learners and with the trainer. They also indicate various support and training retention strategies: trainers with large blocks of availability, immediate review of learning through the potential of on-line training, the creation of virtual communities of adult learners, conventional training meetings linked to on-line time (hybrid approach), the awarding of attestations for steps, etc.

Lastly, we should indicate that all interviewees think it is important to examine the issue of distance education. This is of the highest importance when we consider the low level of participation in services, scheduling and distance limitations, the need to offer different facilities and training modes,

the emphasis placed on the expression of the demand and also, the needs expressed through the Info-Alpha line.[18]

We have noted that the term "distance education" is a significant irritant in itself. It is automatically associated with isolation, remoteness, an image of a person alone in his or her learning, etc. For a population with little schooling, this type of training seems rather irrelevant. However, following discussion of a different concept of distance education that is based on a hybrid approach combining distance education and more conventional instruction, adapted to learners in literacy training and that suggests different forms of support and coaching, many put aside their reservations and show interest.

Thus we believe it essential to review the term "distance education," which does not really say very much about literacy training. In France, the term used is "open distance education" ("formation ouverte et à distance," or FOAD). The accepted definition of this concept refers to a training mode that does not rely solely on face-to-face in-class training. This term fits better with our own vision of distance education applicable to literacy training and it refers to the organization of training rather than to tools and resources. We should emphasize that this term was chosen by the European Union and the Délégation générale à l'emploi et à vocational education (DGEFP) (France) to designate training that calls both on the distance education mode and on more traditional distance training. Here, openness refers to the conditions of reception and to pedagogical organization: "absence of admission requirements, training itinerary chosen by learners based on their availability, their own pace and a contract established between learners and the institution, their choice, their availability."[19] In a context of literacy training and basic education, the concept of openness is of the utmost importance for offering the flexibility and support that adults require:

> [Thus,] open distance education is an organized, finalized model, recognized as such by actors; that takes into account the uniqueness of individuals as individuals and as members of a group; and that is based on complementary, plural learning situations in terms of time, location, human and technological pedagogical mediation and resources.[20]

The concept of open distance education and its definition correspond to distance education applied to literacy training, as we conceptualize it, based on our research. However, once again, we believe it is not descriptive enough. More simply, we could talk about a "**hybrid approach**" that combines multiple distance education and in-class models with appropriate, flexible support. In this research report, as in the document "Distance Education in Literacy Training: A Hybrid Approach," we have chosen the term "hybrid approach to distance education."

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18. The Info-Alpha Line (1-800-361-9142) is a free, confidential provincewide service. It offers reception and assistance to illiterate persons. It is an initiative of the Literacy Foundation.
19. Jean-Claude Barbarant, "Des cours par correspondance à l'apprentissage à distance," *Actualité de la formation permanente*, 1998, n° 156. [Translation]
20. Groupe de travail, "Conduire un projet de FOAD," *Le B.A.BA de la FOAD*, June 2002, 5. [Translation]

2.2 Relevant findings for a hybrid approach to distance education in literacy training

Many promising elements emerge from the initiatives we were able to examine, mainly with respect to human and pedagogical aspects, technological assets and organizational elements. Throughout this part, the main findings are taken from the Alpha*Route* studies (phase 2 and the final version of Joëlle Arnoldo's report, which deals specifically with the use of ICTs in an experimental distance education model in prisons) as well as from our investigation of four experiments in literacy training. Mary Ann Burke's study of distance education also enriched our reflection.

Interactivity and telecommunication methods consider very interesting possibilities for hybrid literacy training. The studies of Mary Ann Burke and Joëlle Arnoldo also address and often in a closely related way, the integration of new technologies into distance education.

Moreover, the Alpha*Route* and distance education in prisons experiments demonstrate significant commitment on the part of participants to their training process. Most of these people appreciated their process and wish to continue with it. In both these cases, despite some difficulties encountered and corrective action to be taken, the experiments proved positive on the whole and justify the relevance we ascribe to the development of the hybrid approach to distance education.

2.2.1 Relational aspects

Many positive elements emerge from these two experiments in human terms. The final version of the Alpha*Route* report relates obvious socio-cognitive progress (self-efficacy, self-concept, independence, collaboration):

> The learner clients spoke openly of feelings experienced while participating in the project. Generally, people are hesitant to begin, but they acquire confidence and independence along the way. For example: "[The learner] was afraid to start the program. She was a little slow at the beginning but once she began, there was no stopping her. It was the program that encouraged her." They indicate high levels of pride, happiness, satisfaction and intelligence. Levels of boredom, feeling lost or nervous were low. People were divided between feeling unhappy or enthusiastic about Alpha*Route*. The mentors cite socio-cognitive results as one of their main successes.[21]

In his study, Arnoldo asserts:

> In addition to the progress observed by all the trainees in terms of skills in using the material, this action gave them the means to restore their image and to develop a feeling of competence they had previously been unaware of. These people

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21. Debra Betty and Kate Tilleczek, L'usage d'AlphaRoute dans les communautés rurales du nord de l'Ontario qui ne sont pas des servies par les organismes de prestation d'alphabétisation et de formation de base (AFB) (Contact Nord/Contact North, 2001), 18—19. [Translation]

> discovered t hat t hey co uld demonstrate concentration, per severance, conscientiousness, pr ecision a nd autonomy. M any w ere a ble t o master t heir impulsiveness; on e p erson, allergic to computers, succeeded i n overcoming hi s preconceptions, [. . .] Their comments refer to self-esteem, validation in the family, reactivation of intellectual abilities years after interrupting their studies, becoming aware of the gaps that they manage to fill in little by little, the construction of new perspectives.[22]

For nearly all the learners involved in this experiment, except one, the benefits of distance education were r eal: " Classified by f requency of c itation, t hese advantages concern i ncreased autonomy, speed of ass imilation, the f reedom t o l earn a lone and t o do per sonal w ork, concentration du e t o individual work and low numbers of learners in the classroom [Translation].[23]

Another element of interest in the final version of the Alpha*Route* report (phase 2) on on-line training, is the presentation of data on the autonomy of people registered in the on-line course.[24] Autonomy in learning i s evaluated ac cording t o f our ca tegories: 1) nav igational s kills; 2) a f eeling of w ell-being with r espect to l earning; 3) the acquisition and d evelopment of l earning methods; and 4) obtaining results and the transfer of knowledge. On the whole, the results are very positive: the participants seem to have improved their autonomy and their competencies. However, those with low literacy levels (1 and 2) experience more difficulty, are less autonomous and ask for more support.

2.2.2   Cognitive aspects

The final version of the Alpha*Route* report deals with the participants' cognitive progress:

> Learner cl ients show pr ogress in r eading, co mprehension, w riting/composition an d spelling. More specifically, they mention and manifest improvement in grammar and syntax. O ne person explained t hat " Alpha*Route* is a gift t hat I r eceived just at t he right time in my life. It's a tool that allowed me to improve my writing, reading and speaking.[25]

In fact, all the people targeted felt they had attained their initial objective and wanted to continue to develop their competencies. Although none were evaluated to have changed literacy levels, all made considerable progress within their levels, which had been anticipated, given the short duration of the project (18 weeks).[26] Following pha se 2 of A lpha*Route*, participants stated that they better understood the mechanics of reading and writing. Those at a more advanced level said they had

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22. Joëlle Arnoldo (2000) 196—197. [translation]
23. *Ibid.* 193.
24. Daniel L. Larocque, *Alpha*Route *(phase 2). Un rapport de recherche*, Toronto, Centre AlphaPlus Centre, 1999, 130 p.
25. Debra Betty and Kate Tilleczek (2001), 18.
26. Ibid.

acquired more co mplex ski lls, par ticularly co mposition, as well as improved co mpetencies in correction.[27]

Moreover, according to Anne Marquis, the advantages of multimedia in learning reading and writing for illiterate adults are numerous. The interactivity it allows facilitates individual learning:

> With the development of "talking co mputers" the co-occurrence of the written an d spoken f orms of w ords can he lp r einforce t he association b etween t he m ental representation of spelling and the phonology of these words. If learners have access to pr onunciation as soon as they enc ounter an u nknown and di fficult w ord, t heir cognitive load w ill be reduced a nd t hey w ill be able t o continue learning independently.[28]

Arnoldo also emphasizes the attractive aspects of image and sound.[29]

2.2.3   Metacognitive aspects

In phase 2 of Alpha*Route*, participants in the on-line training experiment reported the qualities of introspection and self-evaluation as well as the ability to connect their emotional state to their ability to learn. They also felt better able to verbally express their ideas and opinions.[30] The final version of the report explains that the improvement of these competencies is itself biased by the experiment which included interviews in which adults were asked to reflect on their learning. However, here we observe an interesting aspect that we will return to in the third section of this research report which deals with the DFGA document "Distance Education in Literacy Training: A Hybrid Approach."

> This exercise itself probably contributed to improving people's communication skills. Such a n ac hievement hi ghlights potential orientations f or d eveloping ba sic knowledge. Although further research is needed, a co mbination of learning activities presented on t he Web a nd d ialogues concerning evaluation an d or ientation co uld prove to be a powerful approach.[31]

Other el ements specific to di stance education were i dentified as allowing socio-cognitive progress. For example, the possibility of working at one's own pace and reviewing poorly understood points as many t imes as r equired are i mportant asp ects raised in many c ases (in t he final v ersion of t he Alpha*Route* report, in the experiment followed by Arnoldo and in the ABC Lotbinière experiment). In another interesting example, Arnoldo talks about a young participant in the experiment, who has little motivation at the outset:

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27. Daniel L. Larocque (1999), 16—17.
28. Anne Marquis, *Adultes analphabètes, apprentissage de la lecture et ordinateur*, diplôme d'études supérieures en sciences et technologies de l'Apprentissage et de la formation, Genève, TECFA, September 2000, 33. [translation]
29. Joëlle Arnoldo, 2000, 204.
30. Daniel L. Larocque, 1999, pp. 32—34.
31. *Ibid.*, 34. [Translation]

> The act ion o f d istance e ducation a llowed t his l earner t o overcome hi s dislike for reading and writing through the use of the computer. Indeed, he was very pleased not to be obligated to write, because "he doesn't like it." He didn't feel that he was writing w hen t yping at t he co mputer and d idn't r ealize he w as always r eading information d isplayed on the scr een. T his positive aspect w as certainly i nsufficient with respect to his training plan. It nevertheless was an important point.[32]

Arnoldo also deals with the triggering effect of this training that gives everyone the desire to learn and t o co ntinue i n the c ase of t ransfer[33] and the fact t hat this type of training makes the act of learning less daunting.[34]

2.2.4 Aspects concerning the transfer of learning

According to the final version of the Alpha*Route* report, the majority of participants feel that the skills acquired in the course of their experience helps them in other projects: "The learner clients said that the A lpha*Route* allowed them t o improve t heir daily act ivities i n l iteracy t raining. T hey sa id t hey attained t heir ob jectives of improving t heir l anguage co mpetencies, w hich are d irectly r elated t o performance at work.[35]

Arnoldo also discusses the transfer of learning and states that "[a]ccording to the resource trainer, the interest of distance education lies in its pragmatic aspect, in the absence of a divide between theory and practice,"[36] which facilitates the transfer of learning.

2.2.5 Computer literacy and telematics

Learning t o use computers and I CTs seems to b e an i mportant m otivation f or t raining. A rnoldo explains that t he us e o f a co mputer and navigating t he I nternet w ere t he primary motivations of participants; pr ogress was observed by ev eryone in t his area.[37] Learning computer ski lls i s also mentioned in t he final version of the Alpha*Route* report, where participants say they are now more competent in manipulating computers: "Learner clients say they have acquired new, more developed skills in navigating the Internet, using a keyboard and computer."[38]

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Of course, the above-reported results are directly linked to the distance education system used in each experiment. Whether these are positive findings or pitfalls to be avoided, they are indissociable from the training system that is implemented. We should recall that our purpose was not to conduct

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32. Joëlle Arnoldo, 2000, 182. [translation]
33. *Ibid.*, 198.
34. *Ibid.*, 215.
35. *Ibid.*, 19.
36. *Ibid.*, 203.
37. *Ibid.*, 195–196.
38. Debra Betty and Kate Tilleckzek, 2001, 19. [Translation]

a detailed study of these systems, but rather to understand whether positive elements could emerge from experiments with distance education in literacy training. The various findings of the Alpha*Route* experiments and the experiment analyzed by Arnoldo allowed us to define the elements that justify interest in hybrid literacy training. They also allowed us, as we will see in section 3 of this research report, to verify and supplement the elements of the DFGA document " Distance Education in Literacy Training: A Hybrid Approach."

2.3 A hybrid approach to distance education in literacy: overcoming obstacles to participation

Generally speaking, a hybrid approach to distance education in literacy training appears to be a relevant way of adapting to the needs of an adult population. The majority of interviewees, like the works consulted, count on distance education as a means of overcoming obstacles to participation.

2.3.1 The need to increase adult participation

The main aspect of interest in developing distance education in literacy training is the potential for increasing the participation of adults in training. As we have already pointed out, the *Government Policy on Adult Education and Continuing Education and Training,* adopted in Québec in 2002, emphasizes the importance of diversifying the locations and modes of training and of ensuring greater flexibility of training in order to better reach the target population. As for distance education, the action plan of the Policy indicates that "basic education programs will be made available on the Internet, in cooperation with distance education organizations, and will be accompanied by the services required to ensure retention and success."[39]

With regard to literacy training in Canada, the Standing Committee on Human Resources, Social Development and the Status of Persons with Disabilities recommends that the National Literacy Secretariat "develop distance learning educational material and facilitate projects that make access to literacy training more equitable for those who reside in remote parts of the country or prefer not to pursue literacy training in institutional settings."[40]

In the United States, a major national summit on literacy training, the National Literacy Summit 2000,[41] gave rise to a national action plan for literacy training.[42] The plan has three priorities: quality, access and resources. It should be noted that distance education and ICTs are an integral part of the chosen lines of action. As far as resources are concerned, distance education-related policies and access to the Internet and education technologies aim to include the resources required for

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39. Québec, Ministère de l'Éducation, *Action Plan for Adult Education, Continuing Education and Training* (Québec, Gouvernement du Québec, 2002), 10.
40. Development and the Status of Persons With Disabilities, *Raising Adult Literacy Skills: The Need for a Pan-Canadian Response* (Ottawa, HRDC, 2003), 52.
41. This summit was organized by the National Institute for Literacy, an independent federal organization subsidized by the U.S. Department of Education of the University of Pennsylvania.
42. Sondra Gayle Stein, *From the Margins to the Mainstream: An Action Agenda for Literacy* (National Institute for Literacy, 1995), 11 p.

adult education and literacy training. As for access to training, it is recommended that each state develop and implement distance education for adults. The plan calls for sufficient investment to maintain and develop resources available to the population for literacy training and distance education.[43]

In Europe, open distance education is also seen to be an interesting avenue for increasing participation in basic education. The integration of ICTs and on-line training is also in full expansion. In the United Kingdom, the Department for Education and Employment (DFEE) asserts that ICTs now play a vital role in adult education. Flexibility of distance education can be important for adults: thus the preferred option is to offer literacy training in traditional venues, in other words, in the classroom and in distance settings, on-line. In Belgium (Communauté française Wallonie-Bruxelles), distance education offers specific programs for adults with little schooling and establishes partnerships with the literacy community at several levels.[44] In addition, at the last symposium of the Association belge pour la lecture, section française (ABLF), in Namur, in November 2005, we met with the person in charge of distance education at Enseignement à distance de la communauté française, in Belgium, Dominique Decraene, who tests literacy distance education activities, mainly using ALFONIC software. This software uses new approaches based on ICTs, including multimedia games, dictations and a dictionary. Ms. Decraene wishes to maintain contact with us in order to share the results of our experiments in hybrid literacy training.

In his study on literacy training and adult education, Daniel A. Wagner emphasizes the importance of the development of ICTs in literacy training and anticipates a spectacular rise in distance literacy education in the coming decade.[45]

2.3.2   A response to limitations

From this viewpoint, a hybrid approach to distance education is a significant asset in overcoming various limitations on participation, mainly concerning issues of schedules and travel. All of the documents consulted that advocate the development of distance education in basic education mainly insist on the potential of this type of training for overcoming these two obstacles.

A Canadian study on adult education, conducted by Mary Ann Burke, demonstrates that distance education attracts people with a socioeconomic status lower than that of other students:

> [D]istance education offers flexibility in terms of dates, places and the duration of courses and the field of study. It offers new possibilities for teaching groups of Canadians whose participation levels in education and training activities have been

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43. Natalie Lavoie et al., Obstacles à la participation des adultes peu scolarisés à des activities de formation dans un cadre d'éducation formel et non formel, 4–5.
44. Catherine Bastyns and Catherine Stercq, La place de l'alphabétisation dans les dispositifs d'éducation et de formation des adultes, État des lieux de l'alphabétisation en Communauté française Wallonie-Bruxelles (Collection Culture-Éducation permanente, numéro 7), 2003, 32.
45. Daniel A. Wagner, Alphabétisation et éducation des adultes , 2001, 23.

among the lowest—people living in rural areas, who have lower incomes and levels of schooling and less experience on the job market.[46]

It sh ould be r ecalled t hat t he par ticipation o f a dults with l ittle s chooling in co ntinuing e ducation activities is currently qu ite l ow: on ly 5. 4% o f adults in Q uébec having less than nine ye ars of schooling take part in continuing education activities.[47]

2.3.3   More flexible schedules

For many adults, work-study or family-study balance is a significant obstacle when it comes to taking courses or continuing with their training. Scheduling issues often complicate the situation, while the number o f h ours and en ergy r equired by st udy, family and w ork r esponsibilities are f actors in discouragement and dr opping out .[48] Since t he hy brid ap proach t o di stance educ ation i s more flexible, adults can organize their weekly schedule based on their own availability and objectives. Adults thus have greater flexibility in managing their training while balancing family and work needs. The possibilities for organizing training are significant in a hybrid approach to distance education.

ABC Lotbinière designed its distance education initiative based on requests from people who could not at tend w orkshops within t he pr escribed sch edule, b ut w anted t o c ontinue w ith a t raining program. As a result, many other adults indicated their interest.

2.3.4   Overcoming distance problems

The hy brid a pproach t o distance ed ucation i s a lso a r esponse t o t he pr oblem o f geographical remoteness, w hich is a s ignificant obst acle t o par ticipating i n t raining.[49] This si tuation par ticularly affects people in r ural en vironments or env ironments remote f rom t raining centres. N ote t hat t he main objective of Alpha*Route* was to offer a literacy training program to people who otherwise would not have had access.[50] Similarly, the experiment with distance basic education in prisons addressed a population that could not frequent a training centre. In these two cases, geographical remoteness was a major o bstacle that w as overcome by distance e ducation. In t he four experiments we monitored, geographical remoteness was a problem that or ganizations wished to a ddress with this training.

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46. Mary Ann Burke, "L'enseignement à d istance: r éduire les obstacles," *Revue trimestrielle de l'éducation*, vol. 5 , n°1, 10. [translation]
47. These data are taken from the Adult Education and Training Survey (AETS), cited in the Ministère de l'Éducation, d u Lo isir et du S port, *État de la formation de base des adultes au Québec*, Q uébec, © Gouvernement du Québec, 2005, 39.
48. Natalie Lavoie et al., 2004, 62 and 66. [translation]
49. *Ibid.*, 71.
50. Debra Betty and Kate Tilleczek, 2001, 28.

2.3.5 An interesting response for greater numbers of adults

Learners are usually interested in distance education because of its flexibility. In England, a study conducted by the Basic Skills Agency to evaluate the effectiveness of a promotional campaign via a telephone assistance line (a 1-800 or toll-free line) indicates that distance education interests many adults.[51] Thus, 60% of people who registered an application for assistance, who registered in a course and who then abandoned their training program indicated that they would have been more motivated by learning at home. However, 90% of people who telephoned but who decided not to register with a program said that they would have been more interested in distance education.

As for the Info-Alpha telephone line,[52] 2.5% of the requests concerning literacy training concerned distance education during 2004-2005, whereas there had been practically no requests of this sort in previous years. This confirms a degree of interest among the target population in Québec. ABC Lotbinière publicized its distance education in literacy training experiment in a regional newspaper and received many requests for registration as a result. Lastly, since it opened, the *Accroche* Web site of the Commission scolaire de Laval has registered a high level of visits, and many people carried out learning activities there. About 70 participation attestations were awarded through this site.

Adults were interested in distance education because it provides them with training that they can integrate into their everyday schedule. According to a survey on the satisfaction of adults participating in a distance education program, provided through the Commission scolaire Marie-Victorin, flexibility is the main motivating factor:[53] 39% chose distance education so they could fit it in with their work hours, 16% did so, given their family responsibilities, whereas 22% said they chose it so they could evolve at their own pace. While schedule and travel issues are not the only obstacles encountered on returning to training, addressing the limitations would certainly facilitate the participation of many people.

2.3.6 A response clearly related to the rise of ICTs

Interest in the development of distance education is particularly evidenced in increasing the participation of adults, and ICTs are closely linked to this interest.

The various modes of communication offered (learning activities and on-line file management, electronic communication, videoconference training,[54] virtual group contacts, forums and chats, etc.)

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51. BASIC SKILLS AGENCY, *Adult Basic Skills Strategy*, 2000, 16.
52. Info-Alpha Line is a toll-free, confidential, provincewide service. It offers reception and assistance to illiterate persons and to anyone who wants access to basic education in reading and writing. It allows users to access appropriate literacy resources in all the adminstrative regions of Québec.
53. L'INDICE, Rapport de recherche "Choisir la distance education." Sondage sur la satisfaction des étudiants en formation à distance (Longueuil, Commission scolaire Marie-Victorin, 2000), 5.
54. "Teleconferencing, through the use of cameras and screens, allows transmission of images and participants, in addition to being able to talk about data and graphics and discuss, can also see each other: Office Québécois de la Langue Française, *Vocabulaire d'Internet plus* [On-line].

make it possible to reach people outside the classroom and to reduce the isolation of people while adapting to individualized learning. On-line communications facilitate contacts between learners and their tutors and broaden access to varied, quality learning materials while augmenting the supply of training services.[55] However, it is important to recall that ICTs are tools that facilitate distance education; they do not meet training needs in themselves. According to Arnoldo, "[as] new organizational tools, ICTs contribute to the coherence of actions and effectiveness of learning; they provide, depending on their use, the opportunity of a new trainer-trainee relationship in a classroom or distant context."[56]

It appears that the integration of ICTs also makes it possible to support learning in basic education and to ensure motivation for adults. It helps improve the management of study time and allows effective personalization of the learning process. The trainers that Arnoldo met take a very positive view of ICTs. They think that the fact of not feeling judged by a machine creates a more comfortable approach to knowledge. They observe the following effects among adult learners: faster cultural appropriation, playful discovery and appreciable improvement of writing, assimilation of concepts if accompanied by systematic work following computer use, taking distance from errors or failure, decreased impulsiveness.[57]

For many of the people we queried, the more anonymous aspect of distance education also appears to be an attractive feature. Adults with little schooling sometimes feel embarrassed about and ashamed of their reading and writing abilities and do not want to be seen in this situation.[58] Distance education ensures a certain degree of anonymity, and thus overcomes a part of the problem.

In addition, the interest that people who have little schooling show in ICTs and computers in itself appears to be an important aspect of motivation. Many of the people we queried over the course of our work confirmed the interest in ICTs shown by adults who frequent their organizations. Moreover, many organizations have integrated computer-training workshops into literacy training, which has allowed them to recruit more participants. Organizations that undertook a distance education in literacy initiative, or one that covered some distance education aspects, also agree. Arnoldo explains that seven out of eleven participants were particularly motivated by the possibility of learning to use a computer.[59]

Despite the recent enthusiasm for ICTs and distance education, many people we queried are skeptical about their integration into literacy training. A great deal of work in research, development, integration and standardization remains to be done in this area. According to Daniel A. Wagner and Christopher Hopey,[60] the training and knowledge of resource persons and specialists in the area of integrating technologies into literacy training are insufficient and often inappropriate: there are still

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55. Daniel A Wagner and Christopher Hopey, *Literacy, Electronic Networking and the Internet*, technical report TR98-10, NCAL and ILI, 1998, 2.
56. Joëlle Arnoldo, 2000, 113. [translation]
57. *Ibid.*, 122.
58. Natalie Lavoie et al., 2004, 86.
59. Joëlle Arnoldo, 2000, 181.
60. Daniel A. Wagner and Christopher Hopey, 1998, 1.

many "technophobic" people, and knowledge is still too limited in the literacy training community. These aspects are addressed in the DFGA document "Distance Education in Literacy Training: A Hybrid Approach."

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Thus all of our work shows that the current interest in the development of distance education in basic education lies with increasing the participation of adults by improving the response to their needs, particularly with regard to the organization of training. The development of ICTs makes it possible to offer distance education that can be adapted to a population with little schooling. **In the case of distance literacy training, a hybrid approach may offer interesting possibilities**. However, it does not address all the difficulties inherent in undertaking and pursuing a literacy training process. Moreover, it is not suitable for everyone. For some people, it can nevertheless offer openness and flexibility that foster participation for some learners. However, we should remember that the hypothesis underlying all of the work on distance education in literacy training and in basic education cannot really be confirmed given the newness of this field. In coming years, alongside the development of this approach, it will be important to examine all the aspects and in particular, the potential effects on participation in training.

2.4   The limitations and pitfalls of a hybrid approach to distance literacy training

Many of the limitations and pitfalls are related to offering distance education to a population with little schooling. The DFGA document wants to circumvent these problems by presenting the guiding principles and conditions required for successfully implementing a project in distance education in literacy training based on a hybrid approach. The limitations of distance education and the needs of populations with little schooling formed the very basis for producing the DFGA document "Distance Education in Literacy Training: A Hybrid Approach." As a result, the difficulties encountered in the context of the four projects that we monitored and in the two experiments that we examined in depth allowed us to improve the document. We also feel it equally important to outline the main difficulties experienced in the Alpha*Route* and Arnoldo projects.

We wish first of all to discuss retention in training. According to the final version of the Alpha*Route* report, only five out of eleven persons who participated in the training project completed their process. It should be noted that this fact is not amply documented in the final version of the report, which mainly aimed to situate and evaluate the distance aspect of training.

This element is not addressed in the experiments that Arnoldo examined. As we have already pointed out, the Québec initiatives that we monitored are too new and do not allow us to draw conclusions. Yet retention in training is a fundamental aspect: it must therefore be studied and documented in coming years, along with the development of a hybrid approach to distance education in literacy training.

While learning through ICTs is an important source of motivation in relation to participation, the need to be able to use computers and the necessary technology creates some difficulties. The final version of the Alpha*Route* report indicates that the main challenge faced by adults is technical in

nature. In addition to a virus that disrupted the experiment along the way, it was observed that participants would have required more in-depth training in the use of the Internet and access to a personal computer, in addition to the ones available to them at the centre.[61] In the distance education in prisons experiment studied by Arnoldo, the awkward aspects that came to the fore mainly involved technical problems and the adaptation time required for distance education at the outset of training.[62]

Another problem indicated in the final version of the Alpha*Route* report, which Arnoldo also points out, concerns the fact that participants would have needed more training materials and examples for each activity.[63] Note that this problem was also identified by the ABC Lotbinière organization and the Commission scolaire de Laval, who, following the testing of their Web site, observed the need for greater numbers of learning activities.

We should also add that during phase 2 of the Alpha*Route* project, which tested on-line training in the classroom, it was observed that some people showed a lack of autonomy throughout the entire process. For example, while most quickly understood the difference between the mentor and technical support, some confused the two roles right up to the end. In addition, some people required the assistance of an intermediary[64] to ask for technical support: they did not feel able to explain the problem or understand the solution on their own.

Lastly, certain participants became aggressive or had exaggerated reactions to common, recognized technical problems (access and speed on the Internet during periods of heavy traffic). These people even explained that they would probably have abandoned the project without the intervention of the "local facilitator" who would remind them that the problem was temporary. Most adults who experienced these difficulties are at literacy level 1 but some were are level 2.[65]

According to Arnoldo, the teachers appreciated this training mode, but he observed that adult learners benefited more. Thus distance education results in a palpable gain from the standpoint of quality, in particular through more rigorous management of the training path:

> The resource trainer points out, however, that the gain in quality goes hand in hand
> with much more formalized work than in the classroom on the part of the instructional
> team and that the gain in learning speed observed among learners is inversely
> proportional to the trainers' preparation time.[66]

In addition, distance education requires a great deal of availability on the part of teachers in terms of coaching and monitoring: they often had to intervene from a distance *and* on site. Distance

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61. Debra Betty and Kate Tilleczek, 2001, 20.
62. Joëlle Arnoldo, 2000, 195.
63. Debra Betty and Kate Tilleczek, 2001,. 20; Joëlle Arnoldo, 2000.
64. During phase 2 of Alpha*Route*, which concerned on-line training for people with low literacy levels, a "local facilitator" was present in the classroom.
65. On this topic, see in particular Daniel L. Larocque, 1999, chap. 5.
66. Joëlle Arnoldo, 2000, 200. [translation]

education thus requires a strong capacity to adapt and significant relational qualities. The level of requirements for competencies is much higher at a distance than in the classroom: availability, sustained attention from the standpoint of communication, mastery of tools and resources, rigour, organization and follow-up.[67] If distance education based on a hybrid approach is not suitable for everyone, there is no doubt that it is not the ideal formula for all trainers either. In this regard, perhaps it would be useful to define criteria for choosing teachers for hybrid training.

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67. *Ibid.*, 201.

3. The document "Distance Education in Literacy Training: A Hybrid Approach"

In this section, we will present and explain the main elements of the DFGA document in light of the data c ollected. T his do cument i s an i mportant guide for s etting up a distance education pr oject based on a hybrid approach. It sets out the guiding principles and conditions for the success of such an i nitiative, exp lains responsibilities in various respects and the main stages of implementation, while presenting the main formulas and potential resources.

3.1 The document as support for development

The DFGA d ocument is a t ool for su pporting t he pr oduction of pr ojects in di stance education i n literacy t raining ba sed on a hy brid approach i n or der t o make t raining s ervices more flexible a nd accessible to adults with little schooling. For this reason the document must take an open approach and f oster the est ablishment of a platform for discussion and reflection for literacy trainers, managers and par tners affected by t his issue. T he r esult obt ained f rom t he act ivities of sc hool boards and i ndependent co mmunity-based l iteracy act ion or ganizations will make i t poss ible t o conduct a subsequent review of the document.

The DFGA document mainly addresses three target groups:

1) Managers, to provide them with a facilitation tool to be used with their staff and to guide them through the emergence of projects in distance education in literacy training based on a hybrid approach

2) Literacy trainers, to propose the major orientations of distance education in literacy training based on a hy brid approach and to provide them with reflection concerning the main competencies to be developed to ensure an appropriate supply of services

3) Partners, to call on t hem to engage in the development of distance education in literacy training based on a hybrid approach

3.2 Guiding principles

The DFGA document sets out six guiding principles inherent in the development of hybrid literacy training. Although general in nature, they form the basis for this type of training system:

1) Increase access to and participation in training services

2) Reduce the constraints for targeted learners

3) Combine distance education in literacy training based on a hybrid approach with training that ensures suitable coaching and support

4) Provide more expertise in distance education in literacy training based on a hybrid approach, and access to high-quality materials

5) Increase the potential of a hybrid approach to distance education in literacy training and keep up with technological change

6) Foster the development of a culture of continuing education through a hybrid approach to distance education in literacy training

Note that we have made very few corrections to the proposals pre-defined by the working committee on distance education in literacy training to formulate the six principles stated above.

Principle 1   Increase access to and participation in training services

This principle is obviously essential. The general aim underlying the *Government Policy on Adult Education and Continuing Education and Training* is centred on the expression of the demand for learning. Since adults are in a context of lifelong learning, the Policy clearly states that "it is no longer sufficient simply to meet the explicit demand. Appropriate mechanisms must be found to stimulate the demand."[68] That means that it is important that the training needs of all adults can be heard, clarified, supported or validated in order to respond to them with all the flexibility that is required. In this regard, we believe that distance education in literacy training based on a hybrid approach is a more flexible means of meeting the training needs of illiterate persons and of reaching them in their own environment.

Principle 2   Reduce the constraints for targeted learners

This guideline is fundamental for everyone we interviewed. In their view, it is essential to diversify modes and locations of training to meet the needs of everyone. The constraints for the targeted persons are significant: time, scheduling and distance constraints in both rural and urban environments. The flexibility that distance education based on a hybrid approach can offer may partially address these constraints. Interviewees emphasize the importance of properly targeting learners, their needs and their limits in order to propose training adapted to their reality.

Principle 3   Combine distance education in literacy training based on a hybrid approach with training that ensures suitable coaching and support

Everyone also agrees on this principle. Coaching and support, whether direct or at a distance, are essential elements of the hybrid approach to distance education in literacy training. All the people we interviewed emphasized the importance of simple, direct and continual contact. Moreover, the Policy advocates taking this need into account in the development of distance education:

> Despite the virtues of distance education, there are some pitfalls associated with it, which can limit its effectiveness in meeting adult education needs. Among the factors that should be watched is the effect of isolation on learners' motivation. The

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68. Québec, Ministère de l'Éducation, du Loisir et du Sport, *Government Policy on Adult Education and Continuing Education and Training* (Québec, Gouvernement du Québec, 2002), 5.

development or en couragement o f t his type o f t raining sh ould be a ccompanied by special support measures in order to minimize the number of dropouts or failures.[69]

Thus we must emphasize the development of innovative and hybrid approaches that are appropriate to a popul ation w ith l ow l iteracy l evels. N eeds analysis, l ike f lexibility and c reativity, will be t he watchwords for designing and favouring relevant coaching and support services. Note that many of the interviewees expressed skepticism about the issue of support; they have many questions about how to provide appropriate support in distance education in literacy education. This aspect is also addressed in more detail in the conditions for success section.

Principle 4   Provide more expertise in distance education in literacy training based on a hybrid approach, and access to high-quality materials

This mainly co ncerns the nee d f or t eacher t raining an d t he n eed for c omputer an d t echnology-related support. A mong the pe ople we interviewed, m any also mentioned the nee d for materials suited for literacy training (classification test, evaluation, learning materials). These needs are often expressed in terms of distribution and sharing.

We should also emphasize the importance of documenting learning in distance education in literacy training based on a hybrid approach. Distance learning involves a number of features, such as the variety of r esources and t raining t ools used. It i s i mportant t o u nderstand t hese f eatures and t o expand knowledge in t his area. T he final v ersion of t he A lpha*Route* report a lso em phasizes the relevance:

> [of] doc umenting and better understanding the surge o f l earning that occurs in distance f ormats. For exa mple, i t is said that learner clients quickly f eel overwhelmed, then they make breakthroughs. Centre mentors and coordinators had a r ole t o p lay i n r ecognizing an d pr omoting t his type of learning a nd progress in literacy training.[70]

Principle 5   Increase the potential of a hybrid approach to distance education in literacy training and keep up with technological change

In general, the purpose of this guideline is to promote logical use of technology and to encourage relevant choices. For example, favour the shared use of a platform that can be adapted to different realities to prevent many organizations from spending too much money on the design or purchase of similar t ools. A nother example: ask interested organizations to c hoose simple t ools that t hey ca n master and update on their own so that they don't have to be dependant on technology and computer exp erts. We sh ould al so conduct a pr ovincewide technology watch that f acilitates developing and updating the hybrid approach to distance education in literacy training.

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69. *Ibid.,* 28—29.
70. Debra Betty and Kate Tilleczek, 2001, 22. [Translation]

This is what we think keeping up with technological change means. We also have to make choices in keeping with reality. Traditional distance education was more or less suitable for people who have little schooling: indeed, these people need contacts and regular support, and computers generally appeal to them, etc. The hybrid approach to distance education in literacy training therefore must take into consideration the potential of ICTs, as far as the reality of these people permits, for improving the supply of training.

Principle 6   Foster the development of a culture of continuing education through a hybrid approach to distance education in literacy training

Here, the aim is to combine distance education in literacy training based on a hybrid approach with the desire to engage in formal or less formal lifelong learning. A first step in this direction can develop the culture of continuing education and training among people who have little schooling who are least affected by adult education. Once again, the potential of the Internet is considered.

In this regard, we quote Arnoldo:

> Lifelong learning seems to have won over supporters [among participants in the distance education in prisons experiment] because nine people out of eleven wish to continue learning, either [individually] by buying a personal computer, or as part of a placement that allows them to balance work and education.[71]

We should also note that the European Commission responsible for Education and Culture is counting on the fact that the vast on-line learning program (*e-learning* or *on-line learning*) could help create a society of lifelong education and training for all.[72]

3.3   Essential and favourable conditions

Thus, the DFGA document presents the main conditions for successfully implementing distance education in literacy training based on a hybrid approach. We have amply discussed these conditions in our work and in the view of all the people we interviewed, they are essential factors in implementing this kind of project. Four conditions are essential in the implementation of this kind of training and three others would appear to facilitate implementation.

The following conditions are essential:

- Services that allow for appropriate coaching and support throughout the training process with the target populations

- Training and professional development for teachers, including follow-up and sustained supervision

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71. Joëlle Arnoldo, 2000, 198. [Translation]
72. Directorate General for Education and Culture, *Better eLearning for Europe* (s. l., European Commission responsible for Education and Culture, n. d.). 1.

- Access to the technologies and equipment required for offering multimodal distance education in literacy activities

- The funding formula, which must be suited to the reality of this kind of training

Facilitating conditions deal with the following points:

- The establishment of an appropriate partnership that allows sharing of and responsibility for development and training

- Access to a common training platform

- Access to a national resource, which can be easily referred to, in order to ensure communication between those who implement projects in distance education in literacy training and the coordination of a technology watch

3.3.1 Essential conditions

3.3.1.1 Services that provide appropriate coaching and support throughout the training process for target populations

Finding an appropriate form of coaching and support for learners appears to be the most important element in implementing distance education in literacy training services. Respondents believe that this is a *sine qua non* condition for the success of this kind of service. Moreover this is one of the main reasons we emphasize the hybrid approach to distance education in literacy training, in order to ensure multiple, complementary forms of support for and supervision of adults while providing an appropriate response to the needs and learning pace of everyone.

There are several possible formulas for support: they are mainly determined by the individual's needs and are tied to the hybrid approach implemented. It should be remembered that an effective system provides flexibility and that it addresses the needs of people and not those of the training system. Large blocks of availability for trainers are particularly important in responding to the diverse schedules of participants and in providing constant, regular coaching. Support can then be offered via telephone, e-mail, videoconference training or any other means deemed relevant.

It would also be important to promote classroom time with the trainer and with the group. Arnoldo's study observed that overall, trainers believe that group class time is necessary for learning.[73] Phase 2 of Alpha*Route* also emphasizes the importance of on-site support. This form of support facilitated upstream promotion and recruitment, assisted learners in finding direction in their training by leading them to make the connection between their goals and made it possible to lend a helping hand when necessary.[74] The importance of interaction between participants, on-site and on-line,

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73. Joëlle Arnoldo, 2000, 203.
74. Daniel L. Larocque, 1999, XIII.

was also emphasized as an aspect of support. In this regard, the work of the CLEM on distance collaboration and telecollaboration tools can be a source of inspiration.[75]

Moreover, several types of support are required to improve the autonomy of people taking a course in distance education in literacy training based on a hybrid approach. From a pedagogical, technical and graphic perspective, the site design itself must provide support for navigation and learning. The targeted learners must be supported in their learning process as well as in their handling of training materials. Thus, the assistance of a mentor and access to a technical support service prove essential for the success of this kind of program.

As for pedagogical support, we should recall in particular Larocque's observation on the positive effect of a combination of Internet learning activities and a dialogue about the evaluation and the orientation of the training process for adults. We could talk here about the potential of a commented learning or training diary, in which people could describe successes and difficulties experienced in their training process and the direction they want their training to take.

From the outset, technical support should have the same importance as pedagogical support. The final version of the Alpha*Route* report explains that the main reasons given for abandoning the project stem from technical problems, the start-up time and the distance to be covered in order to get to the training centre.[76] Arnoldo also deals with the importance of technical support and indicates that the main difficulties stem more from these problems than from a lack of basic knowledge.[77]

It should be noted that more support is required at the beginning of the project and that it concerns both pedagogical and technical issues. According to the final version of the Alpha*Route* report, although the number of hours of support required varies among individuals, it is certainly more extensive at the outset of training and tends to subside over the course of the process. Although there is generalized confusion between pedagogical support and technical support at the outset, most people grasp the distinction rather quickly.[78]

Appropriate support emphasizes targeting individuals who might enroll in literacy training and who can define their needs and limitations. It provides them with training that fits with their reality. Many respondents assert that the adults who could benefit most from distance education in literacy training based on a hybrid approach are those who are in the second phase of training, as recognized in literacy training. Others think that this kind of training could be suitable for adults at lower levels who can benefit from appropriate support and supervision. In the case of phase 2 of Alpha*Route*, which focused more on the autonomy of learners in an on-line environment, adults at literacy levels 1 and 2 took part in the experiment. While they experienced progress, they required much more support at every level.[79] In any case, it is essential to pay attention to initial reading and writing skills and mastery of technological tools so that adults enrolled in a distance education in literacy training

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75. Mario Breton, 2005.
76. Debra Betty and Kate Tilleczek, 2001, 13.
77. Joëlle Arnoldo, 2000, 211.
78. Debra Betty and Kate Tilleczek, 2001, 23.
79. See Daniel L. Larocque, 1999, chap. 5.

program do not become discouraged or lose motivation. As they develop autonomy in the learning process, attention must be paid to self-training ability. Bridging programs and direct contacts at the outset of a program are usually required to present the site and activities. In this regard, sometimes more intensive traditional support can be provided to the weakest at the beginning. Lavoie and others emphasize the importance of the quality of reception, which usually affects the outcome of the process; in our opinion, the hybrid approach to distance education in literacy training should take this reality into account.[80]

Support for adult learners must also take into consideration each person's training project and perseverance associated with attaining objectives. As for customized literacy training, as is still the case in Québec school boards, training is based on the life situations of adults which require learning activities in reading, writing and arithmetic and which determine the training needs. If other needs did not emerge in the course of training, adults might leave the literacy program after they feel their needs have been met. In the case of distance education based on a hybrid approach, as in other forms of literacy training, this should be considered as a beginning and not as dropping out.

Adults who participate in distance education in literacy training activities must also receive support, when possible, from their environment. For example, team activities could be proposed to include family members or neighbours.

3.3.1.2 Training and professional development for teachers including follow-up and sustained support

The training and support provided to teachers is also a major issue in the implementation of a hybrid distance education system. A training period before the beginning of a project must prepare teachers to adapt to a hybrid context. The final version of the Alpha*Route* report indicates that it is important to provide more training with the software used; trainers wish to pursue their training for a certain period of time before learners arrive.[81] We also believe that in addition to training for the chosen system, it would be important to provide teaching staff with training on the instructional aspects of this type of teaching.

A number of aspects must be taken into consideration with regard to support for trainers. First, a resource person must be available during the session. He or she must provide them with support both for teaching tasks (particularly tools and materials) and for monitoring enrolled adult learners and managing their files. The resource person should also provide support to the trainer in the role of mediating participants' learning and in terms of the various instructional aspects of hybrid literacy training.

One aspect of support that must be considered is the need to know what is being done in the field and related issues. The people that we interviewed, particularly the promoters of the experiments that we monitored, emphasize the necessity of disseminating information about ongoing and

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80. Natalie Lavoie et al., 2004, 134.
81. Debra Betty and Kate Tilleczek, 2001, 21.

completed experiments and the materials produced. A great deal of material and resources exist, but are relatively little known. Some suggest access to a bank of resources and materials adapted to distance literacy training. In this regard, we should point out that the Alpha*Route* project, Arnoldo's study, and the Commission scolaire de Laval and the ABC Lotbinière projects indicate the need to have more training activities and exercises. Appropriate distribution of existing material could help trainers in their task.

It is also important to provide concrete support for trainers in their task and recognize all the time that a hybrid approach to distance education in literacy training demands. While trainers spend less time on lecture-style teaching in distance training mode, they devote a tremendous amount of time coaching and supporting learners in their process, while at the same time managing the learners' follow-up and files. The final version of the Alpha*Route* report deals with the time required for the task versus the time that is recognized: allotting more hours both for support and management tasks is advisable.[82] Arnoldo also mentions this need.[83] In addition, the project promoters that we monitored are also adamant about the necessity of recognizing more work hours in order to complete the tasks inherent in the hybrid approach to distance education.

Among those we interviewed, many feel that attitudinal change is necessary in the literacy training community. It is important to help trainers believe in the possibilities of these kinds of services by presenting them with positive processes or a project likely to succeed, which will allow them to take ownership of the issues. They also indicate that literacy teachers are usually dynamic and creative. It would be important to allow them to participate in the development of models in the hybrid approach to distance education in literacy training.

Lastly, all of the people we interviewed also emphasize the importance of ensuring that the administration of the organization and the other actors involved take part in the development of this approach, especially in school boards. This would enable coherent development and would not depend solely on the enthusiasm of one individual. This kind of involvement would also foster the implementation of training and support mechanisms for teachers.

3.3.1.3 Access to technologies and equipment required for providing multimodal distance education in literacy activities

Many respondents indicated that access to computer materials is important. Of course we are talking about access to material for organizations but also for adult learners. The population that literacy training aims at often comes from disadvantaged environments and is seldom adequately equipped. In this regard, Lavoie and others explain that the precarious material conditions in which many people with little schooling live mean that the costs appear to constitute a significant obstacle to their

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82. *Ibid.*, 23.
83. Joëlle Arnoldo, 2000, 211.

participation.[84] Distance education therefore should not involve fees: it should be free and provide participants with the required materials free of charge.

In addition, people emphasize the need to establish ties with community organizations to facilitate access to the necessary material, such as libraries, community centres or even neighbourhood schools. However, they explain that currently, access to these venues is often difficult, especially outside large urban areas: few locations and computers offered, restricted hours, limited on-site assistance, etc. It is important to reflect on this aspect from the outset of a project. Many possibilities could be considered depending on the context of the environment and the promoters taking part in the project. For example, the Commission scolaire du Chemin-du-Roy project provided the required materials free of charge to participants.

Lastly, in choosing the resources and tools necessary for a project, it is important to consider the equipment available to participants in order to offer appropriate activities in connection with the possibilities. Thus, once again, the local and regional context must be taken into account. For example, if high-speed Internet access is not available in some regions, it will be difficult to integrate many types of on-line activities.

3.3.1.4 Funding mode suited to the reality of this type of education

Funding continues to be an important concern for the people we interviewed and also appears to be an essential condition for the successful implementation of distance education in literacy training based on a hybrid approach. These individuals underscore the importance of funding adapted to the development of hybrid models, but also of regular funding to maintain distance training services and to upgrade the system and the materials as well as to ensure coaching and support that are suitable for learners enrolled in this kind of service.

They emphasize the fact that ratio funding is not suited to development or to support for this kind of training, in both education networks, that is the school board network and the network of independent community-based literacy action organizations. A significant concern in terms of funding involves project sustainability. At present, the available resources mainly concern development and not the supply of training. The four projects monitored thus obtained grants for development under the Joint Federal-Provincial Literacy Training Initiatives (JFPLTI) Program,[85] but the promoters are concerned about maintaining and renewing their initiative.

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84. Natalie Lavoie et al., 2004, 54.
85. Joint Federal-Provincial Literacy Training Initiatives (JFPLTI) Program.

3.3.2 Facilitating conditions

3.3.2.1 Establishment of an appropriate partnership to support the sharing of responsibility for development and the supply of training

The establishment of a partnership could b e a facilitating c ondition for i mplementing s ervices. Whether f or t he upgrading o f a t raining sy stem, f or sh ared use of a platform or o f material, for recruitment or providing the training, etc., joining with partners who have expertise in the field might be a suitable choice, once again depending on the context of the environment and the organization that decides to commit to implementing such a project.

In any ca se, i t i s important t o c learly i dentify t he di vision o f r oles and t asks. Alpha*Route* and Arnoldo's study discuss the importance of clearly defining and respecting everyone's roles and tasks.

3.3.2.2 Access to a common training platform

A training platform is defined as "software that assists distance learning. This type of software brings together the tools required by the main users of a model whose purposes are distance consultation of pedagogical content, individualization of learning and tele-tutoring."[86]

Throughout the course of our work, we became familiar with distance education in literacy training initiatives or initiatives with some aspects of distance education as well as many initiatives for the development of self-study materials using ICTs or on-line learning. This development, as we have indicated, demands a great deal of energy and very often, a significant financial investment. On the one hand, t he r isk of ne edless ov erlap a nd r epetition should b e avoided and o n t he ot her h and, literacy or ganizations interested in distance ed ucation sh ould b e o ffered a quality pl atform t hat i s easily adaptable to their specific training projects, and that is easily accessible and of course, free.

Indeed at t he co nclusion of our r esearch, w e bel ieve i t obv ious that ac cess t o a co mmon t raining platform would be a f acilitating condition f or the implementation o f a t raining se rvice f or l iteracy training organizations. In this way they could access various possibilities that are adaptable to the training needs of the learners and interested organizations. An organization would thus not need to devote time and effort to developing a training system and could spend time directly on organization and the instructional aspects of the training service.

However, w e sh ould s pecify t hat t his training p latform sh ould b e flexible and adaptable for a ll organizations. T his is not a quest ion of st andardizing t raining, but of o ffering a co mmon t ool t o literacy training organizations that could use and adapt it to the training needs of the learners they are addressing and based on their own characteristics.

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86. Éric Écoutin and N athalie Even, *Mise en œuvre de plateforme de formation à distance*, *Fiche pratique n 3: Les documents*, [On-line], http://ressources.algora.org/telecghargement/tel/document.pdf. [translation]

This training pl atform co uld a lso be a v enue for teacher t raining a nd professional development: offering telecollaboration between resource persons and specialists and for adult learners, proposing instructional resources, etc.

This platform could be developed or adapted based on an existing model. We believe that it must be defined by a national organization in collaboration with the working committee on distance education in l iteracy t raining, i ncluding, i n par ticular, r epresentatives of gr oups promoting on going i nitiatives and partner organizations.

3.3.2.3 Easy access to a national resource to ensure communication between people implementing projects in distance education in literacy training based on a hybrid approach and the coordination of a technology watch

This need was confirmed throughout our investigation, especially by the four organizations that we monitored. The promoters, like the other organizations we met with and who want to implement a project in distance education in literacy training, expressed concern about the fact that they were not familiar with other initiatives, that they were isolated in their process and above all that they didn't have ac cess t o a ll t he exp ertise t hat is currently bei ng dev eloped in t he field. T hey a lso communicated their interest in having access to a national resource that could assist them over the course of their process either to get them networked with other people and organizations, or to refer them to other resources or relevant documentation. What is more, these promoters indicated that it would have been very helpful for them to have had access to this kind of resource to undertake their initiatives. Obviously such a possibility could only foster the emergence of services in distance education in literacy training based on a hybrid approach.

In ad dition, the coordination of a t echnology watch related t o distance education in literacy t raining based on a hy brid ap proach w ould be e ssential for i ts development and maintenance. This watch should addr ess both technological and ped agogical asp ects.[87] It co uld be co ordinated by the national resource which would be responsible for its supervision, taking into account literacy training and the needs observed in the field, and disseminate and share the resulting information.

A national resource should be designated by the Ministère de l'Éducation, du Loisir et du Sport and it should be vested with a specific mandate and confirmed in a memorandum of understanding signed by both parties.

3.4 Other aspects addressed in the proposed document

The document "Distance Education in Literacy Training: A Hybrid Approach" also presents the main formulas available t o i nterested or ganizations as w ell as potential r esources for a ssisting t he implementation of projects in d istance ed ucation i n l iteracy t raining bas ed on a hy brid a pproach. Note that the elements set out below mainly serve as examples and do not constitute a complete list

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87. In this regard, see Joëlle Arnoldo, 2000, 47—86.

of formulas and possibilities. Moreover, given the rapid evolution of technology and the innovative nature of this field of study, these resources also evolve very quickly.[88]

3.4.1 Main formulas and possible resources

There are many possible ways to provide distance education in literacy training based on a hybrid, often complementary approach:

- the Internet pr ovides access to on -line l earning relying on m ultimedia resources that allow adult learners to learn at their computers

- the various modes of communication such as on-line communication, telecollaboration and videoconference training are available

- CD-ROMs and others (courseware, tutorial, learning software, etc.) offer dynamic interactive learning scenarios

- video presents scenarios and training sequences

- audio cassettes provide instructions for carrying out learning activities

- print m aterial consists of t raining act ivities presented i n an adu lt learner's workbook or other document, etc.

As may be observed, there are many constantly evolving resources for distance education in literacy training. This wealth of resources contributes to the development of hybrid training but they are not really useful unless people know about them and share them. In this regard, the DFGA document presents organizations that are authorities in the field and potential resources for distance education in literacy training based on a hy brid approach. Again, this does not constitute a co mplete list, but rather a number of useful references.

Here are a few examples:

Reference organizations

La Société de formation à distance (SOFAD)
http://www.sofad.qc.ca

Le Réseau pour le développement des compétences par l'intégration des technologies (network for developing competencies through the integration of technologies) (RECIT)

http://www.recit.qc.ca

Le Centre de documentation sur l'éducation des adultes et la condition féminine (CDEACF)

http://www.cdeacf.ca

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88. Recall in particular guiding principle 5 i ntended to promote logical use of technology and t o encourage relevant choices.

Resources

The CDEACF inventories the main Web sites for on-line learning, literacy training and various on-line resources.

The DFGA Web site provides access to a report on distance education in literacy training published in 2002 at the following address: www.meq.gouv.qc.ca/dfga/. It summarizes distance education around the world and presents an inventory of distance education practices using descriptive sheets. It also refers to on-line literacy training activities and other Web sites, software and CD-ROMs in the field of literacy training.

In addition to the initiatives described in this research report, a number of distance education projects were experimented with, such as the STEFI and ALPHASIM projects. The documents and instruments prepared for the ALPHASIM experiment are accessible on the DFGA Web site (www.mels.gouv.qc.ca/DFGA/subjects/alphabetisation/guide/cont_alphasim.html), and the following address provides information about the STEFI project: http://clic.ntic.org/clic20/stefi.htm

The experiment with telecollaboration piloted by the CLEM is documented in the research report *La collaboration à distance, un outil stratégique en alphabétisation. Rapport de recherche-action* available on its Web site; a guide to telecollaboration tools is also available on the site.

3.4.2 Responsibilities in distance education in literacy training

The DFGA document also proposes a definition of responsibilities in distance education in literacy training based on a hybrid approach in terms of recruitment, the implementation of a team of tutors, access to required materials and in terms of management and supervision.

However, in the course of our research, this section of the document drew very few comments. For this reason we were not able to verify the aspects concerning responsibilities. When the document is implemented, we will continue our reflection in order to elaborate it in the company of persons concerned.

Conclusion

Distance education in literacy training

After preparing and submitting various documents to the working committee on distance education in literacy training and to the authorities concerned at the DFGA, i.e. *La formation à distance en alphabétisation, état de la situation* (2002), *Éléments d'un cadre de référence pour la formation à distance en alphabétisation* (2002), *Rapport d'étape de l'étude sur le développement de la formation à distance en alphabétisation* (2003), we submitted this report, which summarizes the data collected for our entire research project. It will guide the final version of the document "Distance Education in Literacy Training: A Hybrid Approach."

The introduction situates the context conducive to the development of distance education in literacy training brought about by the publication of the *Government Policy on Adult Education and Continuing Education and Training* and sets out the main phases of our work in the field and the results obtained to date. The first section summarizes the chosen methodology, i.e. the qualitative approach, and describes phases 1 and 2 of our research. Phase 1 involves a study conducted among organizations to determine their interest and expertise in distance education and to gather their comments on the DFGA document, whereas Phase 2 reports on four interviews conducted with four literacy training organizations.

The second section deals with distance education in literacy training: we attempt to define this concept in order to propose an approach that is better suited to the realities of the target population, i.e. **the hybrid approach to distance education in literacy training**. It focuses on a number of findings concerning relational, cognitive and metacognitive aspects, the transfer of learning as well as the computer and telematics aspects. We are also associated with a study on the obstacles to participation. Its purpose is to show how distance education in literacy training based on a hybrid approach would foster the participation of adult learners.

The third section presents and explains the main features of the DFGA document in light of the data collected. Following the conclusion, we will formulate the main recommendations that we feel are essential for the development of distance education in literacy training based on a hybrid approach.

The recommendations that conclude this research report are based on a number of essential conditions that we wish to summarize here:

- Training that takes into account the needs and characteristics of the target population while ensuring appropriate support

- Training or professional development for trainers and implementation of the resources required to support their initiatives

- An effective model involving easier access to computer materials and any other required materials

- A suitable funding mechanism that involves budgetary regulations organized according to the needs and characteristics of distance education in literacy training based on a hybrid approach; to this end, school boards currently receive standardized 80% funding for distance education in other sectors of general education. We believe it important to pursue reflection on the costs and the management of hybrid literacy training. At present, we have not been able to collect all the data illustrating the financial limitations and benefits of this kind of training

- The establishment of a network and the implementation of a partnership allowing the management of training activities and the sharing of resources made available to the target population

- The commitment of managers and actors taking part in the development of this field in training centres or organizations

Distance education based on a hybrid approach: a necessity for the development of literacy training

Over the past five years, our work in distance education in literacy training has allowed us to observe that it was not only possible to adapt this kind of training to the field of literacy training, but that many people among managers and those responsible for literacy training in school boards and community-based literacy action groups along with teachers had hoped for and envisaged this. The experiments and initiatives we studied and monitored provide sufficient elements of interest and positive results that allow us to assert with conviction that if distance and classroom contacts are provided, the development of a hybrid approach in distance education in literacy training is strongly desirable and feasible.

A policy calling for reflection and action

Not only does the *Government Policy on Adult Education and Continuing Education and Training* call for more flexible services and consideration of diverse venues and types of training,[89] but it also emphasizes the following point:

> The potential of distance education should thus be developed; to do so, it will be important to pool our energies, act collaboratively, reach a critical mass of adults, modernize the supply of services and adopt an approach centred on the clients and their needs. In short, the supply must correspond to the real and potential demand.[90]

Even if distance education may involve a number of pitfalls that may call into question its relevance, such as the isolation of adult learners, we believe that the hybrid approach would make it possible to avoid these pitfalls, in part. The Policy clearly states that distance education further diversifies modes and venues of training and that it contributes to overcoming problems concerning the time

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89. Québec, Ministère de l'Éducation, du Loisir et du Sport, *Government Policy on Adult Education and Continuing Education and Training* (Québec, Gouvernement du Québec, 2002), 5.

90. *Ibid.*, 29.

and location constraints experienced by many adult learners who want to undertake a training process. The hybrid approach could thus increase adult participation while providing an approach better suited to the needs of adult learners than a more traditional form of distance education.

Development based on prior learning

In the course of our research, it became obvious to us that Québec has developed expertise in the integration of ICTs in the field of adult education and literacy training, as well as in terms of the relevance and conditions required for implementing models of distance education in training venues.

This progress encouraged us to propose future development that could be based on the expertise developed in the literacy training environment and which would be rooted in the results of our research and the resulting document "Distance Education in Literacy Training: A Hybrid Approach." As we have pointed out, since the official founding of SOFAD in 1996, significant impetus was given to the development of distance education in connection with general education for adults. However, this development has not had the same kind of support in literacy training. Currently, organizations are not receiving any support or supervision to get involved in this area. **It is our greatest hope that this report will provide the arguments required to define the resources that will foster the development and implementation of quality distance education in literacy training based on a hybrid approach and ensure its sustainability.**

Knowledge to be developed

As we have seen, despite very promising breakthroughs, many aspects remain to be explored following the implementation of a hybrid approach to distance education in literacy training. It is important to study a number of questions or hypotheses that still need to be verified, confirmed or developed, particularly with respect to increasing the participation of adult learners through distance education based on a hybrid approach as well as the effects of this type of training on adult learners and retention in training as opposed to the support provided.

We think it is obvious that the hybrid approach is an innovative, interesting approach that should be developed and promoted in order to respond to the target group. Nevertheless, this field of research is still young and should be further explored. In this respect, we believe that Québec could define itself as a leader in the development of distance education in literacy education based on a hybrid approach, a service that could interest actors in the field and the target population.

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Appendixes

Appendix 1
Interviewees and data collection tools

Research phase 1

Denis Gauthier, coordinator
Janine Labonté, trainer
ABC Lotbinière
Région de la Chaudière-Appalaches
(April 15, 2002)

Robert Nolet, assistant director
Centre Louis-Jolliet
Commission scolaire de la Capitale
Région de la Capitale-Nationale
(February 19, 2003)

Jean-Denis Julien, education consultant
Commission scolaire des Chênes
Région du Centre-du-Québec
(March 11, 2003)

Maryse Ouimette, education consultant and teacher
Commission scolaire de Laval
Région de Laval
(March 31 and April 28, 2003)

René Marcil, director
Guylaine Bourque, head of literacy training
Centre d'éducation des adultes du Chemin-du-Roy
Commission scolaire du Chemin-du-Roy
Région de la Mauricie
(April 15, 2003)

Jacques Lavoie, education consultant
Josée Sénéchal, francisation teacher
Commission scolaire de Montréal
Région de Montréal
(April 23, 2003)

Carole Falardeau, education consultant
Commission scolaire Abitibi-Témiscamingue
Région de l'Abitibi-Témiscamingue
(May 2004)

Tool 1

Interview questionnaire for people interested in distance education in adult education

Isabelle Coulombe and Margot Désilets

February 2002

Factual data

- Date of the meeting
- Interviewee
- Interviewee's function
- School board or organization represented
- Administrative region
- Duration of the interview

General comments on and impressions of the interview

Theme 1: Conditions for starting up a distance education project

What are your general impressions of distance literacy training?

Have you previously considered offering distance education in literacy training?

- If so, what happened with this project?
    - What were the main problems encountered?
    - What solutions did you implement to solve them?
- If not, why?

In your opinion, what are the essential conditions for implementing distance education in literacy training services or activities?

To implement a distance literacy training service or activities, what are your needs in terms of materials, and pedagogical and organizational support resources?

What about the training needs of trainers in this field?

Theme 2: On the document "Distance Education in Literacy Training: A Hybrid Approach."

Do you have general comments on this document?

Principles and required conditions

Do you have any comments on the following principles?

- Increase access to and participation in training services:
- Reduce the constraints for targeted learners:

- Combine distance education with sufficient support:
- Offer greater expertise in distance education in literacy training and provide access to high-quality materials:
- Increase t he potential of distance ed ucation in l iteracy t raining a nd keep up w ith technological change:
- Develop a culture of continuing education:

Are there any other elements to be considered?

Do you have any general comments on the required conditions listed in the document? Are they appropriate, relevant and sufficient?

What do you think about each of the required conditions listed in the document "Distance Education in Literacy Education: A Hybrid Approach"?

- Organizational c onditions (staff, acc ess an d r ecruitment mechanisms, c lientele r eached, etc.):
- Financial conditions (registration codes for activities etc.):
- Material conditions (required technologies and equipment, etc.):

Would y ou su ggest any changes to the required co nditions? Are there other elements to b e considered?

Responsibilities and available resources

Do you have any comments on:

- the r esponsibilities defined i n t he d ocument " Distance E ducation in L iteracy T raining: A Hybrid Approach"?
- recruitment?
- the implementation of a tutor team?
- access to required kits and material?
- management and supervision?

Do you have any general comments on the resources available for distance education in literacy training?

What are the most important resource needs in offering distance literacy training?

Future prospects

In conclusion, do you have any comments on the future prospects for distance education in literacy training?

Tool 2

Feedback Form

Isabelle Coulombe and Margot Désilets

Winter 2003

Introduction

For a long time now, diversification of adult education facilities has been recommended, specifically in the *Government Policy on Adult Education and Continuing Education and Training,* which stresses the need to increase accessibility by diversifying the types of educational services offered and the places where those services are provided. "Encouraging the expression of the demand and meeting this demand are the keys to raising awareness of the importance of basic education and lifelong learning. C onsequently, services must b e a dapted t o t he needs and t he sp ecific situations of individual adults and communities."[1]

Action Research

To support the development of distance literacy training projects, a frame of reference was prepared in t he f all o f 200 2 by t he D irection gén érale de la f ormation g énérale d es adul tes (DFGA). T he objective of this action research is, first and foremost, to validate this frame of reference.

Feedback Form

The purpose of this form is to obtain your feedback on the activities that you conduct which relate to the above-mentioned frame of reference.[2]

Description of your distance literacy training project that relates to the action research

In this section, please provide a detailed description of the distance literacy training project that you developed.

1.1   General des cription of t he si tuation r elating to d istance literacy t raining w ithin t he sc hool board or co mmunity-based l iteracy gr oup. Why are y ou i nterested in d istance l iteracy training (context, needs, concerns, etc.)?

1.2   Short- or long-term changes expected after implementation of distance education activities:

1.3   General d escription o f act ions taken t o i mplement di stance e ducation activities (recruitment of participants, dev elopment o f activities, implementation o f a distance education department, piloting of distance education methods, etc.):

1.4   What activities have you developed for your project?

1.5   What are the main obstacles that you have encountered?

---

1.   Québec, Ministère de l'Éducation, du Loisir et du Sport, *Government Policy on Adult Education and Continuing Education and Training* (Québec: Gouvernement du Québec, DFGA, 2002), 5.

2.   The time required for filling out this form is approximately one hour per 15 weeks.

1.6   What has been helpful to your implementation of these services?

Your feedback on the proposed frame of reference

In this section, please provide feedback on the proposed frame of reference, drawing on your experience in distance literacy training.

Definition of the Frame of Reference (pages 4 and 5)

2.1   Do you have a ny comments or suggestions r egarding the d efinition o f the frame of reference ("What is a frame of reference," "What is the purpose of a frame of reference," and "Who might find this frame of reference useful")?

2.2   Do you have any other comments or suggestions on the above-mentioned section?

Guiding Principles (pages 6 to 8)

2.3   The first principle, *Increase accessibility and participation,* stresses the importance o f increasing a dults' p articipation in t hese i nstructional se rvices. With t his goal i n mind, i t addresses three main elements: the needs analysis, the previously acquired abilities of the targeted learners, and the resources required. In your view, is this relevant? Do you have any comments?

2.4   The se cond pr inciple, *Consider the pressures and obligations of the targeted learners,* notes that when determining the types of services to be offered, it is important to consider the obligations (personal and organizational) of the targeted learners, and their needs during t he t raining per iod (contact w ith e ach ot her and w ith t he t utors). What is your opinion? Do you have any comments?

2.5   The third principle, *Provide sufficient support for distance education users*, focuses on the support offered to learners. What are your observations in this regard?

2.6   The fourth pr inciple, *Provide more expertise in distance literacy training, and access to high-quality teaching materials*, considers more broadly the expertise required for literacy training.

   a)   Do y ou have any co mments regarding t he su pport t hat sh ould b e given to l iteracy training providers?

   b)   Do y ou hav e any co mments regarding t raining n eeds already exp ressed in t hese areas?

   c)   Additional comments.

2.7   The fifth principle, *Increase the potential of distance education by keeping up with new technologies,* addresses the development, design and purchase of materials. Do you have any comments in this regard?

2.8   The sixth pr inciple, *Develop a culture of lifelong learning*, relates to the potential of distance education to promote literacy. What are your comments in this regard?

2.9   Comments or suggested changes to the section on the guiding principles:

Methods Used for Distance Education (pages 8 and 9)

2.10 For the learning activities you have piloted, which tools have you chosen to use and why?

2.11 In your opinion, what works best?

2.12 In your opinion, what does not work well?

2.13 Would you like to suggest any changes to this section of the frame of reference?

Available Resources (page 10)

2.14 Would you like to suggest any changes to this section of the frame of reference?

Required Conditions (page 9)

2.15 What ar e y our ob servations regarding t he c onditions required t o o ffer d istance literacy training activities?

   a) Organizational co nditions (staff ne eded f or d istance educ ation act ivities, m ethods of access, recruitment mechanisms, population served, etc.);

   b) Financial conditions (registration codes for activities, etc.);

   c) Material conditions (required technologies, equipment, etc.);

   d) Additional comments.

2.16 Would you like to suggest any other changes to this section of the frame of reference?

Responsibilities (page 11)

2.17 Do you have any comments on the appropriateness of the responsibilities defined in the frame of reference?

   a) With respect to recruitment?

   b) With respect to the creation of a team of tutors?

   c) With respect to access to materials and kits?

   d) With respect to management, administration and training?

2.18 Do you have any recommendations or suggested changes for this section?

Future Prospects (page 12)

2.19 Do y ou h ave any c omments or su ggestions on cr eating a c ontext conducive t o implementing distance literacy training?

2.20 Do you have any comments or suggestions for developing distance education activities or initiatives?

Conclusion

2.21 We would appreciate any additional comments or suggestions with respect to the frame of reference:

Tool 3

Record sheet for Ludolettre, for organizations interviewed

Isabelle Coulombe and Margot Désilets

Winter 2004

1. What are your general impressions of distance literacy training?

2. Have you previously considered offering distance education in literacy training? If so, what happened with this project? What were the main problems encountered? What solutions did you put in place to solve them?

    If not, why?

3. In your opinion, what are the essential conditions for implementing a distance education in literacy training service or activities?

4. To implement a distance literacy training service or activities, what are your needs in terms of materials, instructional and organizational support resources?

5. What about the training needs of trainers in this field?

6. Do you have any general comments on the resources available for distance education in literacy training?

7. What are the most important resource needs for offering a distance literacy training service?

Do you have any comments on the following principles?

Principle 1: Increase access to and participation in distance education services

a) The needs of the population in terms of accessibility and training needs and interests:

b) The previously acquired abilities of participants (autonomy, competency levels):

c) The resources required for chosen activities (instructional material, preferred tools):

Principle 2: Consider the constraints for participants

a) Organizational constraints:

b) Family, financial, scheduling and travel constraints for targeted learners:

c) Contact between learners and their tutors:

Tool 4

Interview questionnaire for organizations monitored (1st, 2nd and 3rd meetings)

Isabelle Coulombe and Margot Désilets

2003

Factual data

- Date of the meeting

- Interviewee

- Interviewee's function

- School board or organization represented

- Duration of the interview

YOUR EXPERIENCE

1. Why did you become interested in distance literacy training (context, issues, concerns, etc.)? General description of how the situation relating to distance education in literacy training was experienced within the organization.

   □ To respond to the expression of a need, or a demand?

   □ To vary recruitment models?

   □ To vary locations and forms of training?

2. a) Who is the target population?

   b) In what ways are they reached?

3. What are the short- or long-term changes expected through implementation of distance education activities?

4. Briefly describe your distance education project:

5. As part of your project, what activities are you currently developing (what stage are you at)?

6. What tools are used in your project, both for training and support?

7. Describe the operations that you were required to conduct to implement distance education activities (recruitment of participants, creation of activities, implementation of a distance education service, experimentation with a distance training mode, etc.):

8. What are the main elements that facilitate your process?

9. What are the main irritants encountered:

   □ Organization of training?

   □ Organization of support?

        □ Funding?

        □ Support from management?

10.   What solutions were found for these problems?

DEVELOPMENT OF DISTANCE EDUCATION IN LITERACY TRAINING

11.   What are your needs in terms of support for helping you with your initiative?

        □ For starting up distance education in literacy training activities?

        □ In terms of professional development?

12.   In y our op inion a nd i n l ight of y our experience, w hat ar e t he e ssential conditions for implementing a distance education in literacy training service?

13.   Do you have any other comments to add?

14.   In conclusion, could you tell us what you think the future prospects for distance education in literacy training are?

Suggest sending them a grid in order to provide comments on the document "Distance Education in Literacy Training: A Hybrid Approach," which would involve a financial contribution of one day.

Tool 5

Interview questionnaire for organizations monitored (last of four)

Isabelle Coulombe and Margot Désilets

Winter 2004

Factual data

- Date of the meeting
- Interviewee
- Interviewee's function
- School board or organization represented
- Duration of the interview

1. What is the status of current work: what stage are you at?
2. What are the initial results or observations that emerge from your testing, if any?
3. What were your initial aims concerning the population reached and are they still the same?
4. What are the main problems encountered?
5   What are the strengths in your project's evolution?
6. What are the needs in terms of support for developing distance education?
7. What are your expectations with respect to national or ministerial support?
8. In your opinion, what are the future prospects for your project?

Tool 6

Record sheet for the four organizations monitored

Isabelle Coulombe and Margot Désilets

Winter 2004

Preamble

The diversification of adult education facilities has been advocated for some time, specifically in the *Government Policy on Adult Education and Continuing Education and Training,* which stresses the need t o increase ac cessibility by di versifying t he t ypes of e ducational services offered an d t he places where those services are provided: "Encouraging the expression of the demand and meeting this demand are the keys to raising awareness of the importance of basic education and lifelong learning. Consequently, se rvices must be a dapted t o t he n eeds and t he sp ecific situations of individual adults and communities."[1]

Action research

To su pport t he dev elopment of pr ojects in d istance e ducation in l iteracy t raining, a document "Distance E ducation i n L iteracy T raining: A Hybrid A pproach" w as prepared i n Fall 2 002 b y t he Direction générale de la formation générale des adultes (DFGA). In order to validate the document and supplement the distance education in literacy training knowledge fund, a study was conducted in 2003-2004, including a study among persons responsible for or involved in this field in school boards and independent community-based action gr oups and action r esearch with sch ool boards and groups testing projects in the field. This action research aims to complete our study.

The record sheet

The main purpose of this record sheet is to allow you to gather your observations arising from the activities that you held in relation to the main document that was prepared.[2]

Presentation of your observations on the proposed document

In this section, we ask you to record, in light of your experience in distance education in literacy training activities, your observations on the elements of the proposed document.

The rationale for the document (pp. 4 and 5)

2.1   Do you have any comments or suggestions concerning the elements in the presentation of the document ("*What is it*", "*Why?"* and "*Who is it for"*?)

2.2   Do you have any other comments or suggestions concerning the commented section?

---

1.   Québec, Ministère de l'Éducation du Québec, Government Policy on Adult Education and Continuing Education and Training working document, (Québec: Gouvernement du Québec, 2002).

2.   The time required to record the data is approximately one day.

Guiding principles (pp. 6 to 8)

2.3   The first principle *Increase access to and participation in training services* focuses on the importance of increasing the participation of adults in training. It considers three main elements to do so: needs analysis, previously acquired abilities of targeted learners and required resources. In your opinion, is this relevant? Do you have any comments?

2.4   The second principle *Consider the constraints for targeted learners* focuses on the importance of taking into account the constraints for targeted learners (personal or organizational constraints) as well as their needs during the training period (contact with each other and with trainers) in order to define the services to be offered. What is your opinion? Do you have any comments?

2.5   The third principle *Provide sufficient support for distance education users* highlights the supervision offered to learners. What are your observations in this regard?

2.6   The fourth principle *Provide more expertise in distance education in literacy training, and access to high-quality materials* considers more broadly the expertise required for literacy training.

   a) Do you have any comments regarding the support that should be given to literacy training providers?

   b) Do you have any comments regarding training needs already expressed in these areas?

   c) Additional comments?

2.7   The fifth principle *Increase the potential of distance education and keep up with technological change* addresses the development, design and purchase of materials. Do you have any comments in this regard?

2.8   Lastly, the sixth principle *Develop a culture of continuing education* relates more broadly to the potential of distance education in promoting literacy. What are your comments in this regard?

2.9   Comments or suggested changes to the section on the guiding principles:

Main formulas for distance education in literacy training (pp. 8 and 9)

2.10   For the learning activities you have tested, which tools have you chosen to use and why?

2.11   In your opinion, what works best:

2.12   In your opinion, what does not work well:

2.13   Would you like to suggest any changes to this section?

Potential resources (p. 10)

2.14   Would you like to suggest any changes to this section of the document "Distance Education in Literacy Training: A Hybrid Approach":

Required conditions (p. 9)

2.15 What are your observations regarding the conditions required to offer distance literacy training activities?

   a) Organizational conditions (staff needed for distance education activities, methods of access, recruitment mechanisms, clientele reached, etc.):

   b) Financial conditions (registration codes for activities, etc.):

   c) Material conditions (required technologies, equipment, etc.):

   Additional comments:

2.16 Would you like to suggest any other changes to this section of "Distance Education in Literacy Training: A Hybrid Approach"?

Responsibilities (p. 11)

2.17 Do you have any comments on the appropriateness of the responsibilities defined in the document "Distance Education in Literacy Training: A Hybrid Approach"?

   a) with respect to recruitment:

   b) with respect to the creation of a team of tutors:

   c) with respect to access to materials and kits:

   d) with respect to management and supervision:

2.18 Do you have any recommendations or suggested changes for this section?

Future Prospects (p. 12)

2.19 Do you have any comments or suggestions on creating a context conducive to implementing distance literacy training?

2.20 Do you have any comments or suggestions for developing distance education activities or initiatives?

Conclusion

2.21 We would appreciate any additional comments or suggestions with respect to the document "Distance Education in Literacy Training: A Hybrid Approach":

Verification of the research hypothesis

In recent years, distance education has become a form of training that has generated a great deal of questioning and interest in literacy training environments and more generally in adult education.

The development of telematics has given a new face to this type of training and offers appealing possibilities. Interactivity, on-line communications and multimedia animation present appealing possibilities for distance education, particularly in literacy training. A number of studies[3] show that these features of telematics facilitate effective intervention with illiterate persons.

In Québec, the draft policy on continuing education, tabled in September 2000, suggested stimulating distance education in order to improve access and increase the participation of adults in training.[4] To re-initiate distance education, the policy proposes developing and promoting it in the education networks and among the population.

Taking these considerations into account and as the result of the first phase of our study, our research hypothesis is as follows:

In general, we can assert that few are indifferent to distance literacy training and for many organizations, it seems to be an avenue that should be developed to improve the supply of services and increase the participation of learners. However, to ensure the implementation of distance education in literacy training, the initial results of the study emphasize the need for support for implementing these activities in school boards and independent community-based literacy action groups, and the need for professional development for teachers, first for monitoring distance training activities, then for the use of information and communications technologies in carrying out these activities.

Do you have any comments on your experimentation in relation to our hypothesis?

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3.   In particular, see the following studies: Anne Marquis, *Adultes analphabètes, apprentissage de la lecture et ordinateur*, diplôme d'études supérieures en sciences et technologies de l'apprentissage et de la formation (Geneva: TECFA, September 2000); Daniel A. Wagner and Christopher Hopey, *Literacy, Electronic Networking and the Internet* (NCAL and ILI, 1998); Basic Skills Agency, *Adult Basic Skills Strategy*, 2000.; Sondra Gayle Stein, *From the Margins to the Mainstream: An Action Agenda for Literacy* (National Institute for Literacy, 1995), 11 p.

4.   Paul Inchauspé, Pour une politique de l'éducation des adultes dans une perspective de formation continue (Québec, MEQ, 2000), 94.

Appendix 2
Description of projects

Description 1: **The Centre d'éducation des adultes du Chemin-du-Roy project at the Commission scolaire du Chemin-du-Roy**

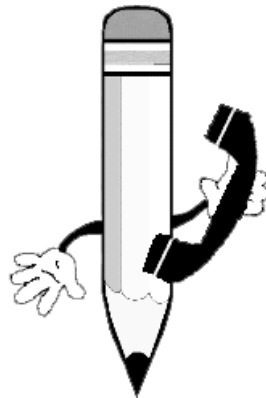# Centre d'éducation des adultes du Chemin-du-Roy

project

Literacy training

Adapted Distance Education Service

Luc Beauchesne and Huguette Larivière

2004-2005

Our school belongs to the

Commission scolaire du Chemin-du-Roy

Context target clientele for the project

This project for an "adapted distance education" in literacy training service . . .

- ▪ . . . was presented by the Centre d'éducation des adultes du Chemin-du-Roy (CEACR), a public institution for general adult education.
- ▪ . . . seeks to solve or minimize certain problems related to training, such as:
  - − the isolation of people, which reduces their chances of having access and persevering in a training program
  - − a difficult reality for the development of a skilled work force; over 30% of the population of Louiseville have a level of schooling lower than a secondary school diploma
  - − the embarrassment and sometimes the shame of admitting not being able to read and write
  - − involvement in a program that imposes constraints that are difficult to deal with in a context of distance, family and job seeking
- ▪ . . . consists in offering an "adapted distance education" service in literacy training in the Louiseville region for adults aged 25 and over, presenting literacy levels corresponding to levels 3 and 4 in the classification recognized by the Ministère de l'Éducation.

"ADAPTED DISTANCE EDUCATION"

This distance education in literacy training program is called "adapted" because it is:

- o **hybrid,** in terms of the place where training is offered (in class and at a distance)
- o and **multimodal** in terms of instructional tools and supervision

TARGET CLIENTELE

This clientele should present a personal training plan and sufficient autonomy to ensure:

- o perseverance in training
- o satisfactory conceptual and functional learning in the implementation of competencies in basic skills: listening, speaking, reading, writing and numeracy
- o success of the distance education in literacy training project

---

- ▪ . . . depends on observations, statements, objectives, recommendations, results:
  - − of the *Government Policy on Adult Education and Continuing Education and Training* (Chapter 5 REMOVING OBSTACLES TO ACCESS AND RETENTION, page 28)
  - − of the *Planification stratégique 2003-2006* of the Commission scolaire du Chemin-du-Roy

- of the working document of the Direction générale de la formation générale des adultes (DFGA) of t he MEQ ent itled *Éléments d'un cadre de référence pour la formation à distance en alphabétisation* -– September 2002

- of the research report by UQAR *Obstacles à la participation des adultes peu scolarisés à des activities de formation dans un cadre d'éducation formel et non formel* – May 2004

- of the pilot project of the adult education centre J'AIME APPRENDRE in Cornwall (Ontario) which, since last year, has implemented a multimodal andragogical model to provide distance education in literacy training and in basic education services [financed by the Ontario Ministry of T raining, C olleges and U niversities (MTCU) and t he National Literacy Secretariat (NLS)]; three other communities participated in this pilot project: Confederation College (Thunder Bay), the Sioux-Hudson Literacy Council (Sioux Lookout), the Community Learning Center in Napanee (Kingston Literacy Community)

Objectives targeted by this project

1. **Increase the number of literate persons.**

   This general objective aligns with the government of Québec's major objective in literacy for Québec's population. It consists in stimulating access to learning and autonomy through basic reading and writing skills, an objective for which we are all responsible as stakeholders in all communities.

2. **Reach people who cannot engage in traditional forms of training.**

   Today, the evolution of technologies and teaching strategies allows us to offer new methods of learning and to reach people experiencing constraints that would previously have prevented them from engaging in training programs.

3. **Reach people who have dropped out of traditional training programs.**

   Many people have dropped out of traditional training programs because of problems with availability, distance or lack of interest. The chosen approach in this project will draw them back again, offer them training that is more suitable to their needs and reduce their constraints.

4. **Offer flexible training, which respects the pace and constraints of learners.**

   Becoming literate is complex and requires adaptation from all learners: each case is different. For this reason, a single program that considers all constraints is inappropriate. The work tools, the trainer-learner relationship and many other elements in the andragogical relationship must be taken into consideration, all the more so in a distance training mode.

5. **Ensure a constant supply of distance education adapted for literacy training for the Louiseville region.**

   From the outset, this project seeks to establish continuity over time to provide a permanent distance education service adapted to adult clientele with little schooling in the Louiseville region.

Expected project results

Objectives	Main activities	Results and outputs	Indicators	Method/Sources:
1. Increase the number of literate persons.	- Promotional activities - Information sessions - Visits to the training centre - Recruitment: enrollments + evaluations + admissions	Promotion, valuing and image of the adapted distance education service	Number of interested learners (waiting list?) Number of enrolled learners Degree of perseverance and enrolled learners	Through communications: - from the CEACR - from the SAE - from the LES - from the community organizations of Louiseville - from local media
2. Reach people who cannot engage in traditional training programs.	- Recruitment through special profiles (local employment centres [LES])	An average of 15 learners in a training group	Number of participants enrolled for the first time	Evaluation and referral at source
3. Reach people who have dropped out of traditional training programs.	- Recruitment through previous CEACR clients	Average of 15 persons in a training group	Number of participants returning to training	Supply of service to clients who dropped out of traditional training programs
4. Offer flexible training that respects the pace and constraints of learners.	- Organized, effective education watch - Adaptation to customized training - Grouping of learners based on personal interests - Project-based andragogy	Availability of varied learning activities Personalized path Personal continuous training project Avant-garde, transferable training model	Number of varied, available resources Degree of use and validation of available resources	Hybrid, multimodal delivery model. Selection and validation of resources available on-line, CD-ROMs and other media
5. Provide a consistent distance education service adapted to a clientele with little schooling in the Louiseville region.	- Financing of facilities through subsidies - Recurrent financing for promotion and human resources	Equipment available to the community Resources available to the community	Value and status of computer equipment dedicated to the program Availability of computer equipment for learners Number of participants + registration date + date of admission to the program	Implementation of a "special class" dedicated to distance education service adapted for clientele with little schooling

"Adapted Distance Education Service": Detailed description

The distance education adapted to literacy training service is based on the official literacy program of the Ministère de l'Éducation

The planned adapted distance education project is based on the *Guide to Customized Literacy Training* which is in fact an official program of study of the Ministère de l'Éducation du Québec in literacy training (refer to the DFGA Web site at www.meq.gouv.qc.ca/dfga).

- *The 4 steps of literacy training*

Correspond to basic education at the presecondary level. They are evaluated among participants through classification tests on entry to training and through summative evaluations over the course of training. All of these measures are implemented based on evaluations produced by the Ministère de l'Éducation.

Recognition of training

The learner's literacy level is assessed at entry and exit: the results of these official tests are recorded in the adult learner's file and are valid for recognition of prior learning and potential certification of studies for a secondary diploma.

Chosen educational path

Through its mission, the Centre d'éducation des adultes du Chemin-du-Roy tries to provide literacy training to help learners to attain a minimum level of schooling or to acquire credits that will help them attain a higher level of schooling. The adapted distance education service mainly seeks to ensure that learners who present interests or abilities linked to an essentially functional approach are grouped together in a traditional classroom where numbers merit, or referred to organizations in the community that can coach them in a more personal process.

Distance education adapted to literacy training service

And its key approaches allowing the success and perseverance of learners

Learners' cohort: a uniform profile

Persons referred to the project will be met before they enter training in order to:

- **Be provided with explanations about the program, procedures and the participant's commitment and responsibilities**
- Verify their interest in taking part in training
- Be evaluated for:
  - literacy training (MEQ classification tests to target learners classified in levels 3 and 4 of the program)
  - for co mputer literacy competence (house q uestionnaire to determine i nterest, potential and the degree of acquired expertise)
  - personal autonomy (house questionnaire on self-perception in functional situations of everyday life) – Verification to acquire and use the 16 PF personality test (R.B. Cattel 1995)

In add ition, i t i s important t hat t he co hort hav e a uniform socio-vocational profile (at w ork, i n j ob transition, unemployed, seeking employed, etc.) to foster the emergence of a stimulating and more harmonious group dynamic in the life situations and the fields of interest of learners.

The learner's commitment: <u>three</u> hours of classroom attendance and <u>fifteen</u> hours of personal work per week

The contract for learners consists in investing a minimum of 15 hours of personal work per week at home. While scheduling flexibility is an important key for reaching learners who cannot take part in a traditional pr ogram, a minimum number o f w ork hours is required. M oreover, t he " computer" medium, very different from classroom mode, ensures greater concentration and effectiveness than possible during the same period of time in the classroom and, on the other hand, implies that after 3 hours in front o f t he scr een, maintaining c oncentration is more difficult. F or t his reason, in t his context, 15 hours of work at home per week represents a balance between an acceptable minimum and a reasonable maximum.

Multimodal educational model

- *Multimodal teaching tools*

The use of several teaching tools (Internet, CD-ROMs, print or others) makes it possible to vary teaching approaches and to provide a more appropriate response to the constraints of learners. This service is just as suitable for persons who have developed computer skills as it is for those who have few skills in this area. The trainer-mentor chooses the instructional materials based on the needs and limitations of learners. This material may be on-line, on CD-ROM, paper or any other media facilitating the learning of learners. All the material used was chosen and inventoried based on the MEQ literacy program as described in the *Guide to Customized Literacy Training*.

- *Multimodal supervision*

Although learners do the main portion of work at home, there is at least one 3-hour classroom meeting per week to create and cultivate contact between learners, an essential aspect for overcoming isolation and ensuring perseverance in the training program. The distance supervision methods are varied. They are based on needs, interests and availability: chatting, telephone, e-mail, virtual forums, etc.

> *In a real situation: a cooperative classroom*
> A cooperative classroom has a distinctive physical layout: more flexible than the traditional classroom and computer lab, it facilitates cooperation between learners and an andragonous appproach integrating computers with teaching.

Available trainer-mentor

The service involves one aspect that surpasses traditional distance education by ensuring extensive availability of trainer-mentors who ensure constant adaptation to the needs of learners and who provide them with the support they need for learning at all times.

Teaching and support: computerized support platform

Commonly called a virtual classroom, a distance education platform is used to present training materials and exercises and to ensure communication with learners. It allows a virtual presence and connection between learners and a trainer-mentor. To date, the Service de l'informatique de la Commission scolaire du Chemin-du-Roy has supported the project by making its portal available to program participants, and by supporting the development of the platform and its integration into the portal. Local partners (InfoTeck, Consultants Androïd and Glob-nd-Com) could also be associated with these developments.

Free access to technology

Winning conditions for successful learning include good tools and a place devoted to learning. Providing learners with a computer and Internet access is a significant stimulant, which allows them to persevere independently of motivation, which is sometimes difficult to support. Access to technology is a significant expense. For many people, the purchase of a computer, which generally depreciates quickly, the recurring costs of Internet access, the costs of software and technical support are a significant constraint. For this reason, this service will provide learners with free computer access during their training, and Internet at home, as well as technical support over the course of their learning.

Integration of a personal training model

The project will begin in September 2005, since end of summer and early fall are a timely moment to register for a training project. The project will continue until the end of June 2006. Two sessions, one in fall and one in winter, are planned to conduct more intensive meetings at the outset and more spread out toward the end. This approach allows learners to develop autonomy and self-discipline in constructing their own strategies.

Entry in continuing education, variable exit

Although they chose a uniform cohort and a fixed date for the project start-up, the approach remains individualized, serving the specific needs of each learner.

Description and role of the main stakeholders

CENTRE D'ÉDUCATION DES ADULTES DU CHEMIN-DU-ROY

The mission of the CEACR is to develop and offer adults a variety of adapted paths in general education, concerning all the competencies they will need to fully play their role as citizens.

In this particular project, the CEACR aims to establish an adapted distance education in literacy training service that could be potentially offered on a permanent basis in the region of Louiseville.

Contribution

The CEACR is responsible for the project:

❑ it develops an adapted service and andragogical strategies required for the target clientele

❑ it guarantees the participation of competent, experienced teachers

❑ it ensures management and professional support for the project

LA COMMUNAUTÉ   THE COMMUNITY

Partnership with local organizations is essential in order to reach as many participants as possible. The Centre local d'emploi in Louiseville is a major partner through its involvement and responsibilities in providing support for the professional development of the population it serves. Other community organizations and businesses are also important partners with respect to recruitment and the identification of the specific training needs of the population.

Contribution

All the partners become key resources in identifying and recruiting learners. In addition, they provide the project with functional support and in some cases, financial support.

ADULT LEARNERS LEV. 3-4

The specific target clientele for this project is:

- over 25 years of age
- employment insurance claimants, social assistance claimants or employed
- meet the selection criteria specific to this program, i.e.
  - have a literacy level equivalent to levels 3 or 4
  - have basic knowledge of computer use
  - have a functional level of autonomy

* The CEACR evaluates these criteria before introduction to training.

Contribution

In exchange for exceptional, preferred learning support, the learners commit to actively participating using the technical resources offered in order to improve their reading and writing skills. What is more, they commit to respecting the equipment that is loaned to them.

MENTOR-TRAINERS

Teachers play a major role in this program. They are called trainer-mentors because they play two roles in this andragogical situation.

They are **trainers**: they meet with, receive and train learners on site, in a traditional manner. They are also **mentors**: in distance education systems, this role is usually reserved to an external resource who supports the learner at distance, using technology (telephone, Internet or other).

This choice is important for ensuring learner perseverance in a multimodal model of distance education. Many research studies in the field of distance education tend to show that the involvement of learners with their trainers is a motivational factor that helps surmount the difficulties related to isolation and that lead to dropping out.

Contribution

In addition to training and supporting learners on site and at a distance, the trainer-mentors must research, test and validate the materials and the technological and andragogical methods required to adapt the training to the needs of learners.

Description 2:   The Centre des lettres et des mots (CLEM) Project

EST@CAD

Exploration of strategies and technologies for distance group learning

Collaborative project in distance literacy training

(2003-2005)

An initiative of the Centre des lettres et des mots (CLEM)

The production of action research on the "**Integration of distance collaborative tools**
in a context of literacy training" was made possible thanks to the JFPLTI program

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STATEMENT OF THE ISSUE

- The Centre des lettres et des mots (CLEM) offers literacy training workshops in two distinct places located in the Mercier territory (neighbourhood in east Montréal). The two instructional environments are about 3 kilometres apart. In order to lessen the impact that this geographical obstacle could have on educational activities common to both locations, the organization set up an experimental project in distance collaboration.

- To solve the problem of geographical distance, the CLEM will use the computers in both computer rooms to link the various workshops in a common network (Intranet and Internet). The implementation of an environment integrating various collaborative distance tools is an adapted solution.

This action research first of all proposes:

- documenting and presenting the various stages of implementation and the adaptation of collaborative distance tools, taking into consideration our educational process (*project-based instruction*)

Second:

- describing the impact (advantages and disadvantages) of distance collaboration on the main actors: participants and the team of literacy training workshop facilitators, and on the pedagogical approach used

OBJECTIVES OF THE ACTION RESEARCH PROJECT

Phase 1 (2003-2004)

PURPOSE

- To describe the optimal conditions for the use of distance collaboration tools from a perspective of project-based instruction (constructivist approach)

TARGETED OBJECTIVES

- Test and adapt the distance collaboration tools to allow participants and the facilitator team to work together on executing common group projects.

- Present the potential uses of these distance collaboration tools, taking into consideration the organization and the operation of the projects and various instructional scenarios.

Phase 2 (2004-2005)
Goals

- To analyze and describe the impacts of the use of distance collaboration tools on the functioning of literacy training workshops, using an approach oriented toward *project-based instruction*

- To present the various projects developed by participants and the members of the facilitator team, during use of the tools, in order to demonstrate their potential for community literacy training

- To determine the impacts of the use of collaborative tools on participants, particularly with respect to:
    - a sense of belonging to a learning community
    - the development of team spirit in executing projects
    - motivation and the development of autonomy
    - the degree of involvement in the process
    - increase in problem-solving abilities
    - improvement of reading and writing competencies by using ICTs
    - group cohesion and sharing information among workshops (co-construction of knowledge).

- To describe the benefits of the use of these tools in the educational intervention of the facilitator team members, in a context of community literacy training:
    - impacts on the role of facilitators
    - degree of assimilation of the various collaborative tools
    - level of cooperation and mutual aid among team members
    - frequency and quality of professional communications and exchanges

- Development of competencies in relation to ICTs (e.g. creation of instructional materials, carrying out instructional scenarios, coordination of projects, assimilation of publishing tools available at EST@CAD, etc.)

- To describe the project(s) that will be carried out in the various workshops (features of the projects carried out, use of multimedia, preferred types of tools for collaboration, pedagogical structure adopted for carrying out projects, etc.)

DEFINITION OF CONCEPTS OF DISTANCE COLLABORATION

- Constructivism is a model of conceiving knowledge that makes learning an act of collaboration. Thus, according to this conceptual model:
    - knowledge is an individual construction resulting from personal experience
    - knowledge is a valid interpretation of our personal world which is developed at a given time (Resnick 1987). This knowledge gains value when it is socially accepted
    - learners construct knowledge based on the features of the field being studied, their personal experience and the context in which the knowledge is used
    - knowledge is negotiated during collaborative interaction among various actors

- The design of a collaborative pr ocess is not limited to interactions but also co ncerns the composition of the learning environment and t he use of other sources or forms of cognition that underlie the process (communication and work tools, diversified sources of information, etc.).

DESCRIPTION OF RESEARCH ACTORS

- 33 participants in the literacy training workshops (approximately 85% of CLEM participants)

- 4 members of the CLEM facilitator team

- 1 research agent (member of GRAFIC)

- 1 computer facilitator

VARIOUS TYPES OF COLLABORATIVE TOOLS

- Synchronous tools are tools that allow learners in remote locations to communicate in real time. They are valued for learning about oneself and for socializing and are used in particular for making decisions qu ickly, f or coordinating act ivities and for offering a dvice or t echnical assistance. Among these tools, the following may be considered:
    – videoconferencing or audioconferencing tools
    – instant messaging
    – chat sessions
    – the use of a whiteboard

- Some of these tools offer the possibility of recording and keeping a record of these meetings, but it is always necessary to agree on a date for meetings. Usage is often of short duration.

- Asynchronous communications tools overcome t he co nstraints of t ime and di stance. Participants can join t he gr oup t o e xchange, di scuss, s hare and co mmunicate at a t ime convenient to them.

- These virtual encounters can last for weeks, months, or years. Exchanges using this type of tool are more r eflective a nd b etter st ructured. Before t hey i ntervene, participants can r ead and analyze the interventions of others. Messages can be read at any time because they are automatically recorded.

- Among asynchronous tools, the following should be noted:
    – discussion forums
    – messaging
    – mailing lists
    – Web logs or blogs

COLLABORATIVE TOOLS PROPOSED BY ESTACAD

- Platform integrating various tools (messaging, discussion forum, training modules, space for sharing documents, chat sessions)

- Video recording tool with possibility of transmission via e-mail

- Web log (blog)

- Tool a llowing group co mmunication v ia v ideoconferencing and s imultaneous group w ork (whiteboard, etc.)

Platform

- Adaptation of an existing platform created by Anemalab, a French company, available in open source code (the code can be modified).

- This is a free software interface.

- This platform was adapted based on the recommendations of participants and the facilitator team (legibility, representativeness of icons, choice of colours, typography and arrangement of graphics, etc.). Many adaptations have been made, and others may be made in future.

- Platform administration tools to manage participant enrollment and facilitator team members, possibility of grouping together participants according to the various workshops or based on projects, management of instructional content, addition of on-line exercises and complementary documents in the training module, etc.

- Separate spaces for participants, the facilitator team and the platform administrator.

- Collaborative tools in the platform: discussion forum, internal messaging, chat tool, space for uploading documents.

The Web log

Instantaneous, blog-type desktop publishing software was added as a collaborative tool to allow all participants to write directly on the Internet and add one or more images to their productions.

- As was the case for the platform, this tool was adapted from the source code.

- Modifications were made (translation from English to French, descriptive texts replaced with icons, certain functions added for publishing and editing articles on the Web log, an overall transformation of the interface, adaptation of the font and font size to increase legibility, etc.). Other improvements can be made when the tool is tested by participants as they conduct their research.

Creation and transmission of video messages

- It is possible to send video files by messaging. Web cam software allows compression of the video's number of bytes for faster transmission.

- This type of video document allows considerable interactivity but in a different time-space frame.

- It also allows more active involvement in carrying out group projects for learners experiencing difficulty with writing.

Videoconferencing tools

- The tool we have chosen for videoconferencing is easy to use and allows exchanges between two to nine participants equipped with a Web cam. It allows participants to chat or communicate by voice.

- This is free software.

- A private space for communication can be created requiring a password.

- Chat sessions can be saved. You can also record the video image of the person you are talking to.

The tool also makes it possible:

- To work as a group in real time with a whiteboard
- To navigate the Web as a group using graphic tools to comment the visit
- To record the work carried out using these tools

A GROUP STORY PROJECT

Integration project

Le secret de l'île Verte is a group story in which each participant is called upon to create a fictional character who interacts in a specific scenario.

Subjects

- Français (lecture et écriture)
- Basic mathematics
- History and geography
- Information and communications technologies
- Environmental sciences: maritime fauna and flora
- Citizenship education

Stages

- Production of texts describing characters, where they live, the interactions among characters and the dialogue they engage in during their quest for the Secret de l'île Verte.
- Production o f illustrations, so und a nd v ideo. Use o f co llaborative t ools for e xchanging between groups of participants. Sending of messages to the discussion forum, publication of certain story texts in the Web log, etc.
- Research on the Internet concerning various story-related themes.
- Creation of instructional materials concerning themes complementary to the story (dictations, crossword puzzles, t exts to be read, vocabulary lists, problem solving, geographic maps, etc.).

At pr esent, w e hav e o utlined t he e lements of t he f irst stage of t he act ion r esearch. This phase anticipated w ork for the a daptation and i nitial exploration of the E ST@CAD t ools. A de scription of the tool analysis and adaptation procedures will be briefly presented as well as a report on difficulties encountered.

The second phase of research (2004-2005) will make it possible to describe the impacts of the use of collaborative tools among participants and facilitator team members at a literacy training ce ntre (motivation, sense of belonging, projects tested, etc.). The second stage will also make it possible to reach another literacy training centre with offices located 7 kilometres further east (*Un Mondalire*).

The r esults of t he action r esearch concerning t he i ntegration o f d istance c ollaborative t ools into literacy training will then be presented in a research report.

Description 3:   The ABC Lotbinière project

Project: Distance education in literacy training

Our project arose from a need expressed by learners who were attending our workshops and who had difficulty following the schedule we had suggested to them. Moreover, we often received requests from learners who wanted to attend our workshops but who had no means of transportation. Others felt embarrassed about attending workshops, for fear of being judged. We wanted the population of our RCM to have access to personalized learning with coaching and instructional support at a desirable time and place.

Since distance education is increasingly used in a variety of sectors, it was necessary to be innovative in the field of literacy training, as we were certain that it would be a method for the future. We were concerned about a drop in the level of participation in our workshops as in many groups in the school boards.

Our project began in fall 2002, and here are the main phases:

Phase 1

2002-2003 and 2003-2004

Project title:

Developing a distance education program through an interactive Web site

We began with research in order to take inventory of the work in literacy training on various methods of distance education via the Internet. We then submitted our research results to our learners and gathered their comments on the difficulties they encountered concerning the accessibility of the sites visited, the vocabulary used, clarity, in short, user-friendliness.

After analyzing their comments and recommendations, we began drafting an initial outline of exercises. As soon as we designed them, we presented them to learners. We made a number of adjustments based on their recommendations.

When we got to the stage of creating the site, we also submitted our work, as it progressed, to participants for their criticism. Ease of access, simplicity and interaction were of primary importance in ensuring that learners could manage without too much difficulty, at home.

Problems encountered during this phase

We had underestimated the time we had to spend on an initial draft for setting up the site and an initial series of exercises. The fact of submitting the entire draft to learners meant that we had to constantly make many corrections.

Along the way, we had to initiate learners to computers so that they could provide satisfactory comments on the work.

The changes requested required the intervention of a technician, which generated additional costs and delays each time.

Phase 2

2004-2005

Project title:

Offering a personalized distance education program via a Web site

In addition to extra exercises, activities mainly concerned the creation of a personal file to serve as the basis for dialogue between the learner and the trainer. First, a group of 3 learners was initiated in the rudiments of computers. They then served as the pilot group for the personal file in the personalized program.

During this phase, we publicized the offer of training in newspapers, meetings with stakeholders in the community and on a public tour.

Problems encountered during this phase

The learners in the pilot group had little knowledge of computers, because since they did not have computers at home, they could not practise. As we expected, we quickly realized that in addition to their difficulties with reading and writing, they had to deal with the problems related to this new technology.

Phase 3

2005-2006

Project title:

Assessing the effectiveness of a new learning method, distance education for the population of Lotbinière

We began offering distance education last September. After the learners enrolled, we sent them a welcome message and asked them to contact us to establish a connection as soon as possible and to ensure that they lived in the territory we serve.

Next, we asked them to complete an evaluation test so that we could better rank their learning level. Sometimes it was necessary to provide an upgrading course or more, so that they would feel more comfortable. These courses were given at the organization or, if an individual had no means of transportation, we would go to his or her home.

We planned on organizing ad hoc meetings to overcome learners' feeling of isolation, to create a sense of belonging and to allow everyone to take part in the life of the organization.

Problems encountered during this phase

We had problems establishing communication w ith learners who enrolled. We observed that the testing done with the pilot group had a significant shortcoming, i.e. that when the activity took place in a workshop under the supervision of a trainer, it was much easier than when a learner was left to his or her own devices. In fact, sometimes all that was required to help the person understand was a short explanation or merely a word. Due to lack of experience, we did not pay sufficient attention to this and now, in the field, it makes a great deal of difference. Distance education really means that there i s a di stance bet ween s ender and r eceiver, and t o make i t a s uccessful experience, t his distance must be r educed as much as possible. We ar e c urrently w orking on si mplifying t he enrollment method and we hope to see new results soon.

Preferred tools in distance education in literacy training for the whole project

- All the activities were tested with learners.
- We already offered basic courses in computers, and we took advantage of the opportunity to ensure that practice during these courses was done by exploring the site during the course of its design.
- Upgrading courses were required to solve specific problems.
- Home visits made the site accessible to those who could not travel and who required assistance.
- In addition to home visits for some learners, we preferred to use telephone communication because it hel ps both learners and t rainers develop a more h uman r elationship t han w ith electronic communications.
- Meetings for learners will m ake s ocialization po ssible, g enerate new interests and pr event discouragement.
- We were also in c onstant co ntact w ith t he j ournalist f rom our r egional newspaper. M any articles about our project were published over the past 3 years, and we received many calls.

Description 4: The Accroche! Project at the Commission scolaire de Laval

ACCROCHE! (2h)

Maryse Ouimette

Commission scolaire de Laval

The Accroche! is an on-line training tool adapted to the reality of a clientele experiencing difficulties reading and writing. The purpose of this tool is to foster learning in order to prevent dropping out of school and to encourage perseverance at school.

An avant-garde site

This site is a virtual location consisting of a bank of instructional resources for adult learners. This is an avant-garde tool because it allows teachers to update content without advanced knowledge of computers.

To date, about 1000 people are enrolled.

An on-line tool supplementing existing resources and encouraging the sharing of activities developed by literacy or francisation trainers will be proposed to trainers.

Lines of action and reflection will be presented based on the analysis of instructional practices in distance education in literacy training.

JFPLTI Project 2005-2006

Central Reserve

Service national du RECIT de la Formation générale et continue des adultes

Test results for the Accroche! site

**Guide to pedagogical recommendations
for the development of distance education in literacy training**

July 2005

Foreword

This guide w as prepared by "Service nat ional du R ECIT – Formation générale et co ntinue des adultes" w ithin t he f ramework of a pr oject und er t he **Joint Federal-Provincial Literacy Training Initiatives** (**JFPLTI) Program – Central Reserve 2004-2005**.

It is divided into three separate sections:

1) **Training and validation of teachers and learners on the Accroche! site**

    - General notes on training programs offered

        - Summary of the chosen approach

        - Training booklets (teachers and learners)

    - Repertoire of teachers' comments and suggestions

        - On the Accroche! site

        - On the environment for the development of Cybergénération

    - Repertoire of learners' comments and suggestions

    - List of changes made to Accroche! in 2004-2005

2) **Technical and instructional suggestions for the development of the Accroche! site**

    - These recommendations relate to the six (6) guiding principles of the documents on distance education in literacy t raining pr esented by t he aut hors Désilets, M ., C oulombe, I . (June-December 2003).

3) **Beyond Accroche!**

    - Lines of action for the development of distance education in literacy training

The following information is found in the appendixes:

- Appendix A: Training schedule

- Appendix B: Questionnaire used to evaluate teachers

- Appendix C: Questionnaire used to evaluate learners

- Appendix D: Synthesis of technical and instructional el ements of Accroche! vs. the guiding principles

- Appendix E: Summary of the analysis of the guiding principles

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Platform validation, activity development
Over 130 teachers in the 11 regions of Québec.
Over 100 learners in 7 regions of Québec.

Chapter I
Training and validation of teachers and learners on the Accroche! site

General note on training programs offered

Following an appeal launched by the Service national du RECIT General Adult Education and its regional SitSat representatives, a large number of directors of the General Adult Education centre responded to the training service offer. The 11 regions participated in the Accroche! tour by hosting the two-day training session in one of their adult education centres (See Appendix A: Training program schedule). Over 140 teachers participated in the training. About one hundred learners later tested the platform.

Summary of the chosen approach

The two-day training session was divided into one day of discovery and validation of the platform and another day of activity development. This approach allowed all teachers to put themselves in the role of learners using the activities and in the role of teachers developing new activities.

The structure of Accroche! makes it possible to show learners the activities that have been validated by those responsible for the site. However, all activities in development for the entire Accroche! community are accessible to teacher-developers for reference purposes. During training programs, the teachers thus had access to a large variety of activities. Over 80 activities were developed. Most were carried out in a testing capacity. Some received approval from the person in charge and can be found on the official site.

Throughout the training, participants were asked to provide comments on the platform. After the two-day session, they also had to complete an evaluation. The results are provided in the following section. The questionnaire is appended to the document. Many changes were made following validation. This validation also made it possible to orient future development of the site. It served as the basis of the recommendations contained in this guide.

Training booklets

Training booklets were integrated into the Accroche! site. The teacher guide explains how to develop activities based on the Cybergénération development site. It was also included in the folder handed out at training sessions. It is in a PDF file accessible under the heading "aide en ligne" on the activity development site at www.cybergeneration.com. Only registered teachers have access to this site.

The learner guide is a multimedia version integrated into the Accroche! site. It is accessible via the "Aide en ligne" button at www.accroche.qc.ca.

Repertoire of teachers' comments and suggestions

Here, we have summarized all the comments gathered from site evaluation grids. The table of validation elements is included in an appendix. During the training session, teachers first evaluated the Accroche! site as used by a learner. Next, they evaluated the Cybergénération platform allowing them to generate new activities (See Appendix B: Teacher questionnaires).

The Accroche site!

The ev aluation i s di vided into t hree br oad t hemes. We ar e pr oviding y ou w ith c omments bas ed on t hese themes.

Content

- The large majority described the content presented on Accroche! as **very good** to **excellent**.
- The video testimonials are greatly appreciated.
- They recognized that activities must be well structured so they can be properly grasped.
- Centralized management should be put in place in order to prevent the repetition of exercises.
- It is regrettable that currently, the vast majority of courses are only drill and practice without conceptual content.
- The types of questions should be more varied.
- For beginners and learners in phases 1 and 2, functionalities should be added allowing greater use of multimedia, adding illustrations and animation.
- Regardless of the learners' degree of knowledge, the site could have more animation.
- A number of ambiguities remain in the terminology. Should we talk about COURSES, ACTIVITIES or EXERCISES?
- The exam results should display the questions where there are mistakes instead of simply presenting the results.

Navigation

- Site navigation is fine except when learners do exercises. It should be possible to go directly to the following question without returning to the whole question bank.
- Access to a s tep should be per mitted w ithout hav ing t o ex amine t he pr evious s tep. T his m akes t he process very long.
- Some requested that manipulation be reduced to a minimum in order to provide an effective response to the literacy training clientele.
- A link should be established between a t eacher and hi s or her learners. Currently, all learners refer to all the teachers registered on Accroche! The approach is certainly more community oriented, but it is too difficult to manage and is too anonymous.
- It is unfortunate that the site requires a high-speed Internet connection.

Visual presentation

- Everyone recognizes the great visual quality of the site.
- Some feel that the writing is too small.
- They ask that long presentation texts be avoided.

Other comments

All the good reasons underlying the development of the Accroche! site emerged during training sessions with teachers. They consider these to be a major aspect of motivation for learners.

- Learning at one's own pace
- Learning in a location that is convenient for us (for the higher levels, 3 and 4)
- A complementary tool to diversify forms of learning
- Excellent sharing tool for creating activities
- Reaching fragile clienteles (in the process of dropping out)
- Possibility for learners and teachers to see their progress
- Is developed according to the standards of the "Guide to Customized Literacy Training"

Despite all the advantages of a computerized training platform, the developers of these applications face major challenges. Accroche! is no exception. The following comments frequently emerged.

- The platform does not do enough to foster the creation of connections between the teacher and his or her learners, in contrast to in-class training.
- Feelings o f i solation c an develop i f ani mation on the s ite and s tudent-learner c ommunication functionalities are not used to their full potential.
- The benefits of teacher-teacher collaboration are not rooted in our culture. A number of reservations were expressed at training sessions even though teachers truly felt there were benefits. Many teachers have strong fears about the distribution of what they are developing. The possibility of sharing helps promote "communities of practice." They provide an excellent opportunity for teachers to see what is being done elsewhere, discuss practices and not to re-create the same exercises.
- A site administrator will be essential for coherent, non-repetitive activity development.

The development environment of Accroche! and Cybergénération

To develop activities for the site, teachers have access to a development platform that we wanted to validate with them. The comments are more positive. Teachers no longer need to know html code to design an activity to be disseminated on the Internet. The interface developed by Cybergénération greatly facilitates set-up. The following comments were gathered.

- Seeing the result of activities that we develop immediately disseminated on the Internet is almost magical. I t's f antastic. T eachers gr eatly appr eciate t he eas e of setting up an ac tivity and i ts instantaneous dissemination on the Web.
- Would like to be able to insert mathematical formulas.
- Ensure greater consistency in the navigational functionalities of the development site. For example, the validation of a question may differ depending on its type, which causes unpleasant confusion.
- Add exercise "copy" functionalities to avoid having to retype the same content too often.

Repertoire of learners' comments and suggestions

Over 100 learners tested the Accroche! platform and answered a questionnaire. (See Appendix C: Learners' questionnaire).

The questionnaire is available at the following Web site: http://www.cssmi.qc.ca/sondage-accroche

The detailed answers can be viewed on the following Web site: http://bv.cssmi.qc.ca:8080/survey   Identifier: martinj Password: jocelyne

Profile

- **Number of respondents**: 103
- **Men**: 35%, **Women**: 60%
- **15-24 years**: 45%; **24-39 years**: 33%; **40 and over**: 22%
- **Region**: LLL: 45%; Bois-Francs: 14%; Montérégie: 10%; Saguenay-Lac-St-Jean: 12%; Montréal: 2%; Estrie: 5%; Abitibi-Témiscamingue: 9%
- Over 60% use the Internet at least a few times a week.
- Nearly 25% use the Internet at home and 35% at the training centre.
- Of those who use the Internet, 40% have high-speed connections at home and 45% at the centre.

Use of Accroche!

- **88% think it is easy to navigate the site**
    - o Corrections that should be made.
        - Too many clicks to do in the questions.
        - See one's mistakes in the exams.
        - Have a "log out" button.
        - Add a navigation bar on the left.
- **78% like the visual appearance of the site**
    - o Main comments:
        - Make it more "chill."
        - More animated features.
        - More "adult" progress.
        - Text is not dark enough and it is too small.
        - Like the presence of people's videos.
- **77% like doing exercises on the Internet**
    - o Main comments:
        - Good for learning at one's pace at home.
        - More visual and at my pace.
        - Offers a new way of learning.
        - You get "instant" results.
        - Difficult if you have a motor handicap (e.g. trembling hands).
- **30% do not agree with doing all of their courses on the Internet**
    - o Main comments:
        - "Human" support and professors' explanations are "essential."
        - Difficult to motivate yourself with the Internet even if staying at home is an advantage.
        - Danger of losing handwriting ability.
        - Leads to plagiarism.
        - Doing written work helps me understand.
- **20% "often" received help to navigate on Accroche!**
    - o Main comments:
        - At the beginning, you needed some support, but afterwards it was very easy.
- **80% would recommend** Accroche! **to other students**

- **What they like THE MOST about Accroche!**
    - o Main comments:
        - Easy to use.
        - Can be done at home at our own pace.
        - Being able to do the questions and get the answer immediately.
        - Can motivate people who are dropping out.
        - Seeing our progress with the portfolio.
        - Being able to send messages to our teacher.
        - Realizing that I am not as "bad" as that.

- **What they like LEAST about Accroche!**
    - o Main comments:
        - Exercises are too easy.
        - Too many clicks required for the exercises.
        - Using a keyboard when you are not used to it.
        - Lack of explanations (we need more DRILLS AND PRACTICE), also explain reasons for a mistake.
        - Not enough images.
        - It requires high-speed Internet because without this, it takes too long to answer our questions.

- **Advantages of courses on the Internet**
    - o Main comments:
        - It allows us to keep up to date with using technologies.
        - It requires me to properly formulate what I think.
        - A good alternative for people who are more visual.
        - Sometimes a computer is more patient than a teacher.
        - Learning at home at our own pace, even during holidays.
        - Less paper.
        - It goes faster.
        - Good learning alternative.

- Instant correction.

- **Disadvantages of courses on the Internet**
  - o Main comments:
    - Lack of personal contacts (no friends, no teachers).
    - Lack of clear explanations.
    - Fast answers but no explanations.
    - Reliability of Internet links not always up to expectations (if it crashes, we're cooked).
    - Need for computer skills.
    - Loss of handwriting ability.

List of changes made to Accroche! in 2004-2005

Following comments received during the training and validation sessions, some changes were made by the Accroche! team. They do not require major changes to the current site but they make it possible to improve it.

- Pairing of teachers with students in their group in order to improve a sense of belonging. The principle of "community" teachers persists, but only for learners who do not belong to a training centre.

- Additional illustrations in the exercise section

- Adjustment of activity setup functionalities to make them more accessible to teachers

Distance Education in Literacy for the Development of a Hybrid Approach

Chapter II

Technical and pedagogical recommendations for the development of the Accroche! site

We have just highlighted the comments of teachers and learners on the use of the Accroche! platform. To guide the future development of the platform, the analysis will be based on the six (6) guiding principles of the documents concerning Distance Education i n Literacy Training pr esented by t he aut hors D ésilets, M., Coulombe, I. (June-December 2003).

We also present some results to reframe the statement of principles and provide a guideline in order to highlight the main changes to be made in the short and medium term (Appendix D: Summary of technical and pedagogical elements of Accroche! vs. guiding principles). Before addressing the whole, we will examine and clarify the definition of the terms used in a computerized learning environment.

Prerequisite: definition "distance education" On-line course[1] in literacy training

The t erm " distance educ ation" r efers t o m any v ery d ifferent t echnical-pedagogical r ealities, from s imple integration of multimedia telecommunications in a t raditional classroom, to multimedia interactive models that make learning available at any time, anywhere (Paquette, G., 2002).

- Another facet of distance education studied in the literature is the "the learning focus" and t he methods and tools for taking stock of them and promoting sharing and reuse. Learning focuses can be presented in the f orm of a s hort ani mated s equence, an on -line documentary t raining s ession, s ound or v ideo recordings, etc. Since they can be accessed from a distance, learning focuses can easily be integrated into the instructional content of courses (REFAD 2002).

In on-line courses, the computerized environment makes it possible to bring together a set of pre-designed, mediated pedagogical resources (tools, information sheets, communication methods, documents, etc.) chosen by a design team based on the features of each course and the various roles played by learners, tutors, content ex perts, m anagers and t he des igners t hemselves (Paquette, 2000). I t i s managed b y a t utor w ho makes presentations and coordinates off-line interactions (asynchronous mode) with a group of learners.

Understood under a variety of terms (e-learning, distance learning, on-line learning, on-line course), these uses of the computer concern an unlimited range of knowledge, abilities and skills. Among all these usages, only the Internet for the purposes of learning was chosen. More specifically, the use of the Internet is limited to on-line courses allowing young adults to access basic education.[2]

The Accroche! experiment made us aware of the obligation to examine new teaching strategies. Information and communications technologies (ICTs) and networking greatly change the parameters for accessibility, flexibility and pool ing o f r esources. A ctivities ar e t herefore ac cessible in v arious l ocations and t hey c an be monitored at any time according to the learner's schedule. Lastly, teachers can collaborate and share in using Web activities that they develop, thereby enriching the resource databases.

Accroche! is devoted to literacy training and add resses adults who wish to improve and develop their reading, writing and numeracy skills. "It allows adults to gather and process oral and written information for the purpose of conducting effective communication, to adapt to the changes in their immediate environment . . . [3]"

From this perspective, the evolution of the "Accroche!" site must be global in order to provide information and support the pedagogical scenario process and the use of the system by various actors.

- We observe that Accroche! has the characteristics of an "on-line activity site" that uses the Internet, media and hyperlinks in a different way than that of a real "distance education" platform. Students can access and interact in activities and pre-designed instructional materials available on the network through writing, or an audio or v ideo r eading. "Learning i s aut onomous, not necessarily r equiring t he c ollaboration of learners.

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1. Grand dictionnaire terminologique. In other words the "Accroche!" site is based on the use of technologies for learning and knowledge transfer, in the form of on-line coures, accessible through a computer network, such as the Internet.
2. M. Désilets, I. Coulombe, (December 2003). Formation à distance en alphabétisation, p. 7.
3. Ministère de l'Éducation, DFGA. (2002) excerpted from Désilets, M. and Coulombe, I. (June 2003). Summary of the framework.

Learners do not only progress at their own pace, but also choose the anticipated learning paths by using activities they think are the most relevant." [translation]. According to the definition of G. Paquette (2002), the Accroche! site represents a "self-training" perspective rather than "distance education."

- Lastly, progress with content is not linear, and the exchanges are managed by the "on-line teacher," or the "associate teacher." Here is what characterizes the two types of teachers encountered in Accroche!

Associate teacher: Each learner is associated with a specific teacher, usually his or her assigned tutor. Accroche! is used to extend the teacher's instructional activities networked on the Accroche! site. In addition, during classroom sessions, learners can refer to their teachers for additional support.

On-line teacher: Learners are not associated with a sole teacher. For support, they can consult all of the teachers registered in the bank of "on-line teachers."

Guiding principles

Since the document entitled: *Éléments du cadre de référence pour la formation à distance en alphabétisation*[4] is the current frame of reference in terms of ICTs and literacy training, we will base the analysis of the Accroche! site on the six guiding principles identified in this text (Appendix E: Summary of the analysis of the guiding principles).

These principles will give rise to actions for the future development of the platform. The six principles are:

- Principle 1   Increase access to and participation in training services
- Principle 2   Consider the constraints for targeted learners
- Principle 3   Combine distance education with adequate support
- Principle 4   Provide more expertise in distance education in literacy training, and access to high-quality materials
- Principle 5   Increase the potential of distance education and keep up with technological change
- Principle 6   Develop a culture of continuing education

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4.   M. Désilets, I. Coulombe (June 2003). Éléments d'un cadre de référence pour la formation à distance en alphabétisation.

Principle 1: Increase access to and participation in training services

The dev elopment of di stance educ ation i n literacy t raining ai ms t o *increase access to and participation in training services.* This pr ocess i s bas ed on *organizational and learning needs* centred on us ers, needs a nd activities. It is also based on *previously acquired abilities (autonomy, writing-related competencies, etc.).*

Organization of distance education equipment

One way of characterizing on-line courses is to examine the organizational mode *of distance education equipment that must allow for diversified choice of training places.*[5]

In a c ontext o f an on -line course, t he d ialogue e stablished bet ween t eachers and l earners i n a computer environment is mainly characterized by **geographical separation** and **intellectual union**.

In fact, a **new way of communicating** must be c reated to work more effectively in this network of exchange. This will help us better understand how teachers and learners are supposed to interact with each other and with another entity located in **physically remote places** that are intellectually connected.

The i nteractions bet ween l earners/teachers and t he I nternet t ake pl ace i n t he main c ontexts i n w hich t hey develop their computer activities: first of all, **at school** but also **at home** and the **community centre,** insofar as this kind of institution increasingly offers public access to the network.

- ▪ **However, environments** are places for l earning activities that c apture information or facilitate interactions with knowledge and people: classroom, home, workplace, computer laboratory, reception organization, etc.

- ▪ Every one of these places proposes learning conditions and interactions that will make it pos sible to determine the global approach that teachers and learners will take to the Internet.

The adv ent of t echnology c entred on i nformation and c ommunication pr ovides s takeholders w ith t he opportunity to access the cognitive tools suggested by the "Accroche!" site." They make it possible to meet the learning needs of *people who use literacy training services* and who want to improve and develop their reading, writing and numeracy skills.

Previously acquired abilities (autonomy, writing- and tool-related competencies ...)

The teachers who we met for the study "agree that people who use literacy training services need coaching and enc ouragement**,** and t hat **not all of them would be able to engage in an independent training process**" (M. Désilets and I. Coulombe, December 2003, p. 7).

We believe it important to offer various modes of assistance in order to create **favourable conditions** so that autonomy c an be ex perienced and dev eloped, as t he aut hor J ézégou bel ieves (Wijsbroeck, P rimois and Jézégou, 2002). An on-line program is not simply about a t echnological transaction but a bas ic characteristic that requires autonomy for learning.

- In t he c ontext of t he A ccroche! pr ogram, per sonalized s upport i s of fered t o peopl e w ith l ow l evels o f schooling in levels 1 - 2 in order to promote the development of learner autonomy. It would be p referable for adults with low levels of literacy to have support in an established structure, i.e. in a classroom context.

For beginners requiring personalized support at the outset of their training in level 1 or 2, functionalities should be added to allow them to make greater use of multimedia.

In this regard, it is important to consider the dynamics of the cognitive involvement of adult learners in promoting t heir aut onomy. I t al so s eems t hat " virtual environments" des cribed as " on-line pr ograms" c an benefit autonomous learners in levels 3 and 4 and who generally master reading.

Briefly, in the context of literacy training, it is more appropriate to use the concept "self-directed learners," i.e. learners who plan their own learning. Self-direction refers an individual to his or her training plan, motives for committing to training, motivation and perseverance. More generally, this is a new way of seeing knowledge centred on the learner.

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5.   M. Désilets, I. Coulombe (December 2003).

The **Accroche! platform also offers multisensory features in the TESTIMONIALS section**. Sometimes it focuses on a s ingle m eaning (reading of a t ext) o r multiple m eanings (video and a udio) in dr ill and pr actice activities. The videos also portray emotional and social aspects in a practical way.

According to the comments of some teachers, the TESTIMONIALS section generates a gr eat deal of interest both among teachers and learners.

- In this regard, some teachers explain that *the TESTIMONIALS* section in video format is *an element to retain* because "*testimonials add a bit of humanity*" *and "learners feel that they are not alone*" *and* "*they are very appreciated by learners*." Testimonials make the site more personal.

- In addition, some teachers expressed the desire to *develop* more video clips to illustrate other testimonials of adult learners experiencing problems with reading and writing.

ACCROCHE! as it is	ACCROCHE! as we want it to be
- The TESTIMONIALS section is an element that should be maintained and developed. They generate a great deal of interest both among teachers and learners. Learners recognize themselves in the comments and they see "that they do not feel that they are alone." - Testimonials add a bit of humanity and make the site more personal. - Videos are an excellent means of animating the site.	- Develop new testimonials on the greater diversity of literacy training clientele.

Distance Education in Literacy for the Development of a Hybrid Approach

Principle 2   Consider the constraints of targeted learners

The main advantage of distance education is that it offers flexibility; it focuses on targeting learners and their needs; their family, financial, time, scheduling and travel constraints are just as important in rural and urban environments.[6] The f ollowing poi nts s hould al so be ex amined: *formats and equipment should* **reduce the isolation** *of adult learners and practitioners,* **facilitate contacts** *between adult learners and with their tutors* **and improve access to varied, quality learning materials** *at low cost.[7]*

Reducing isolation

We can talk about collaboration, cooperation, or even **community practice** for **reducing the isolation** *of adult learners and for practitioners.* A set of br anched perspectives r evolves ar ound collaboration among t eachers and others, both within and outside educational systems, in the planning and development of learning activates for learners in literacy training.

The i solation t hat t raditionally s eparates t eachers c ould be ov ercome w hen t hey ar e pr ovided w ith a flexible, effective means of communication **that leaves behind written traces** (forums, e-mail, videoconferencing, whiteboards).

ACCROCHE! as it is	ACCROCHE! as we wish it to be
- Multimedia and the use of "Breeze" videoconferencing capsules	- To be used but in a form that can be used on a server other than Breeze. Perhaps requires the use of a platform other than Breeze, such as "Captivate," recently acquired by the Service national du RECIT FGA.

Briefly, this involves developing abilities and attitudes for being able to act and interact in a group, a team, in association and partnership, at a distance, asynchronously or synchronously, in order to meet in a real **community of practice** that works to develop activities for the benefit of literacy learners.

Here are the comments of teachers on testing Accroche!

*The benefits of teacher-teacher collaboration are not rooted in our culture. Many reservations were expressed during training sessions even though teachers are aware of the benefits. Many teachers have great fears about the dissemination of the activities they develop. The possibility of sharing leads to the promotion of "**communities of practice.**"*

They provide an excellent opportunity for teachers to discover what is being done elsewhere, to discuss practices and not to repeat the same exercises.

The **community of practice** triggers r eflection that refers t o a pr ocess o f par ticipation and i nvolvement, identification and bel onging, negot iations and as similation am ong al l ac tors. H owever, t he s trategies ar e inevitably negot iated i n or der t o s hare and as similate knowledge, s kills and abi lities, br iefly, everything t hat links k nowledge and   skills i n di fferent pl aces and t imes (J. Benoît, 2000) . We w ish t o c reate pos itive interdependency among teachers. This interdependency will be promoted through the sharing of knowledge, information and resources among all stakeholders of the **multidisciplinary instructional team at Accroche!.**

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6.   M. Désilets, I. Coulombe (June 2003), 6.

7.   M. Désilets, I. Coulombe (June 2003), 6.

Motivational aspects

It should be recalled that feelings of isolation and solitude are common for people registered in on-line courses. In addition, it is important to understand how interactivity can maintain motivation and lessen **isolation, and stimulate learners** to allow them to pilot their training process and foster discussion among learners so that they continue with self-learning.

Hartley, Gill, Walters, Bryant and Carter (2001) tell us that learners must be supported to maintain **motivation** when completing work alone. Studies on **the motivational aspects** of on-line programs indicate that it is important to preserve a degree of social involvement, mainly through the implementation of ways of gratifying learners (Tu, 2000).

- The **Accroche! site** proposes a gratification procedure that fosters learners' motivation by granting an attestation to all learners at the end of each stage, along with a bookmark and a letter encouraging them to continue.

- As part of the study, teachers and learners frequently remarked that they appreciated the issuing of certificates. Certificates are excellent tools for motivation. For many people, it is the first time that they have received an attestation of academic success.

Another motivational aspect in the on-line course concerns electronic communications made possible through user-friendliness and interactivity during exchanges among stakeholders. It generates **active participation** on the part of everyone, and particularly among learners.

- In this regard, the **GAMES** section is a *refreshing* addition to on-line activities. However, since the development of a GAMES section could be burdensome, this section only uses existing games available via hyperlinks. It could be promising to use game shells[8] available on the Internet that offer a flexible, simple structure to generate learning activities for the Accroche! platform or other freeware.

ACCROCHE! as it is	ACCROCHE! as we want it to be
- Games are a refreshing addition. They take the site beyond its academic mandate. Links to entertaining and educational games are the most appreciated.	- It would be important to classify games based on categories to be defined. When there are too many games, they are hard to locate.

Facilitate contact between adult learners and their tutors

The concept should be explored **and questioned,** as we establish **interrelationships** between teachers and learners in on-line literacy programs when they involve self-learning and self-teaching, in order to understand how all stakeholders interact and evolve.

We are dealing with a technology that creates environments and that is not limited to providing rapid, diversified access to information and activity resources on-line, but that provides learners enrolled in learning support with an:

- **"Associate teacher"** who manages interactions with learners enrolled in an institution or centre or community organization working in literacy.

- **"On-line teacher"** who coordinates interactions in differed time (asynchronous) with learners from a virtual community.

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8. Carrefour virtuel de jeux éducations (CVJE) http://carrefour-jeux.savie.ca.

The pur pose of t he A ccroche! pl atform i s t o dev elop appr opriate r esources t hat al ign w ith t he v irtual environment. I t is a matter of leaning t oward one -on-one c ommunication as oppos ed t o one pe rson communicating with many, in order to promote exchange and m aintain motivation, by creating the illusion that someone i s behi nd t he screen. (Cutler, 1995 i n Kemery, 2000) i n t he on -line **course with no in-class sessions.**[9]

- In concrete terms, learners who turn on their computers have access to all the tools they require to direct their l earning, hav e ac cess to the t eacher and i nstructional m aterials t o carry out t heir l earning. T hus t o compensate f or t he l ack of a c onnection bet ween t he t eacher and hi s or her l earners i n a virtual environment, we plan to develop the student's **portfolio**, to make the environment as interactive as possible. The portfolio would become the learner's **virtual office.**

Relational interaction: communication tools

The tools that f oster c ommunication bet ween t eachers and l earners pr ovide an oppor tunity t o es tablish relational interactions. From this point of view, networked activities must be carried out through **two-way exchanges** between the l earner and t he t eachers. T hese i nteractive m ultimedia t ools can also foster communication between learners and serve as a gathering place for learners and teachers in the course and for teachers themselves in order to adjust the functioning of the activities.

Asynchronous or delayed communication tools such as e -mail and e -forums al low s takeholders t o exchange i nformation, communicate with each other and c onsult resources at a c onvenient time i n pl aces of their choosing (Paquette, 2000) to promote interrelationships between enrolled learners and teachers.

The Accroche! platform provides s takeholders w ith a n on -line as ynchronous t ool, s uch as e -mail, w hich learners appreciate. Enrolled learners were able to exchange individual messages with teachers using e-mail.

- *80% would recommend ACCROCHE! to other students*

- *What they like MOST about ACCROCHE!*
  - ○ *Main comments:*
    - ▪ *easy to use*
    - ▪ *being able to send messages to our teacher*

ACCROCHE! as it is	ACCROCHE! as we want it to be
- The on-line course approach does not foster the teacher-student relationship.	- Develop ways of ensuring effective, interesting and motivating exchanges between teachers and their students.

Here, we examine e-mail, which allows teachers faster, easier interaction with their learners. **E-mail** allows the learner and the teacher to exchange messages in pairs. The enrolled learner delivers information, defends his or her point of view and responds to the teacher, and can send files for discussion and evaluation of activities (Paquette, 2000; Henri and Lundgren-Cayrol, 2001).

- The asynchronous mode allows learners to have flexible schedules, to be in interaction at convenient times in terms of time limitations and personal needs with respect to the learning process and in executing the project.

A connection should be established between the teacher and his or her learners. Currently, all learners refer to all of the teachers registered with ACCROCHE!

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9. Training or education that takes place in the presence of a trainer or teacher in a classroom. OQLF (2002).

Asynchronous mode: forums

Henri and Lundgr en-Cayrol (2001) pl ace gr eat emphasis on t he **asynchronous forum,** which "plays a major role in distance collaboration" in carrying out a project in forums and for performing tasks. To have targeted learners and t eachers di scuss and i nteract, w hy not us e t he di scussion forum or e -forum? We w ant t hese forums to contribute to supervision of students in a context that is broader than a course.

Through forums, **organize discussions on specific themes** to help learners further explore their reflection. Other types of forums could be offered to all users. These e-forums demonstrate the intense nature of the relationships that are established between participants, the wealth of information that emerges from the sharing of ideas, and allow time for reflection, which promotes collaborative work.

- ▪ The research conducted by Henri and Lundgren-Cayrol (2001) indicates that learners united in a forum discover an "unexpected capacity for action and socialization" (p. 76) [translation]. Ricciardi Rigault et al. (1993) suggest using e-forums as **telesocialization** to channel informal, spontaneous exchanges.

- ▪ Henri and Lundgr en-Cayrol (2001) add t hat f orums w ere des igned t o facilitate interactions am ong participants and t o supervise group dynamics. The tasks performed in **e-forums are more concrete**. In this regard, "some learners explain that the forum is the place where one can elaborate without fear of bei ng j udged. O thers ex plain t hat i t i s t he **format that invites people to take part**; i ts s tructure facilitates reading and rapid analysis of the interventions" (Oubenaissa, 1999, p. 235) [translation].

- ▪ **The asynchronicity of e-forums** makes i t pos sible t o preserve messages. T hus " ideas don' t disappear," as Henri and Lu ndgren-Cayrol point out (2001, p. 69). Support must be given to the tutor who becomes a **discussion facilitator**, without whom synchronous and as ynchronous meetings risk failing to provide truly productive interactivity (Paquette, 1999, p. 160).

ACCROCHE! as it is	**ACCROCHE! as we would like it to be**
- No forum and no moderator	- Add a forum and moderator-facilitators

Whiteboard, videoconferencing

However, the real-time synchronous discussion tool, such as the whiteboard or videoconferencing requires the simultaneous presence of all stakeholders, either the learners themselves, or learners and the tutor.

- Interaction i n **synchronous mode** mobilizes learners **on the same schedule** to negot iate t hrough immediate reactions and interactions, such as discussion among learners and the exchange of information about the collaborative task to be accomplished.

However, to i ncrease t he effectiveness of communication bet ween t eachers and enr olled l earners, t hey m ust be provided with more effective tools to exchange and to support collaboration.

Improve access to learning materials

Improving ac cess t o i nstructional m aterial w ould r equire t hat t he A ccroche! s ite pr ovide c ontextualized and diversified on -line ac tivities. T his m eans o ffering a v ariety of m edia al lowing learners t o c hoose a m ode of interaction t hat i s adapt ed t o t heir needs . N ot onl y does t he br anching t utorial pr ocess a llow l earners t o progress at their own pace, but it also allows them to choose the activities.

Teachers on t he A ccroche! m ultidisciplinary t eam dec ided t o des ign new materials f or ac tivities or r euse existing materials, adapting it to their needs.

- Teachers dev elop t he ped agogical r esources and m aterials, self-manage t hem, c onduct ex ercises, communicate w ith l earners on an i ndividual bas is, c reate ac tivities and i ntegrate i nto t he A ccroche! platform. From this perspective, emphasis is placed on **the operationalization of activities** thanks to increasingly sophisticated, intelligent technology that supports learners.

Categorize: for user-friendly classification

- Teachers would like to be able to classify the types of resources used. Another way of categorizing scenarios is to examine the type of learning activities they contain, as in the suggested structure below:

ACCROCHE! as it is	ACCROCHE! as we want it to be
- The presentation of activities lacks structure. With over 60 activities developed, it is difficult to sort through them.	- A structure for the **ACTIVITIES** has been proposed and remains to be validated. See the **STRUCTURE OF ACTIVITIES** section.

Suggested structure for the activities on the Accroche! site

ACCROCHE! makes it possible to develop activities serving different purposes. All are associated with specific learning focuses. Some only contain exercises with no explanation of the learning focus. Others are more complete and explain concepts of the learning focus. Lastly, some activities can be associated with a theme in day-to-day life in order to better contextualize learning. Here is an explanation of the differences between each type.

"Drill and practice" activities: These activities are limited to a series of activities performed by the learner. The learning focuses are considered to have been presented before the exercises are performed. An exam can be inserted. Certificates can be issued. The exercises are usually not contextualized, in other words, they basically refer to an academic concept of French or mathematics and do not include a scenario illustrating its use in everyday life. It is currently the most commonly practised and simplest form of activity in ACCROCHE!

"Conceptual" activities: If exercises are combined with explanations about a learning focus, the activity becomes independent and much more complete. Learners can then use ACCROCHE! for the purposes of acquiring knowledge which adds value to "drill and practice" activities.

"Thematic" activities: Concepts or simply exercises concerning a concept of French or mathematics can be introduced into a context or a theme that will spark the interest of the learner. For example, texts on the theme of diet aimed at learning to read in French can be combined in one activity on "A Healthy Diet." This same activity could also include mathematical concepts (like the rule of three) in order to master calculating the price per portion of a food.

The organization of activities in ACCROCHE! should take into consideration these differences so that users (teachers and learners) can make sense of them.

Here is a suggested initial structure

- Activities (ACCROCHE! course)
  - By learning focus
    - Français
      - Drill and practice
      - Conceptual
    - Mathematics
      - Drill and practice
      - Conceptual
  - By theme (life situation)
    - Life situation covered
      - Learning focus covered
        - Français
          - Drill and practice
          - Conceptual
        - Mathematics
          - Drill and practice

The database will be structured to meet the needs of this approach. The teacher creating an activity will have to fill in the information to "categorize" it.

Suggested "Activity Identification Sheet"

Subject of the activity	French and/or Mathematics
Learning focus(es) of the activity:	Choose from among the list of indicated learning focuses. Include a field for "other."
Level of the activity (1 to 4)	Choose the level(s) that the activity addresses.
Type of activity	DRILL AND PRACTICE: The activity does not include an explanation of the learning focuses. CONCEPTUAL: The activity includes explanations of the learning focuses.
Theme of the activity	Choose from among the list of themes provided. E.g. Health, diet, politics, travel. Include a field for: "none" (for activities that are not contextualized). Include a field for "other."
Name of the developer or the team, the centre, the region.	Choose from among the list of "authorized teachers."
Date created	Automatic field.
Date last revised	Automatic field.

Principle 3:   Combine distance education with sufficient support

*Emphasize the development of **innovative, hybrid approaches** that can be adapted to a population with low literacy levels. **Appropriate supervision and support** for learners with low literacy levels involved in a process of on-line training is fundamental. It is important to ensure appropriate pedagogical supervision and **simple, continuous contact** between the learner and his or her tutor.*[10]

Hybrid system — supervision and follow-up

From a perspective of distance education, this "on-line" activity site should give weight to hybrid systems in which "human" tutors and teachers intervene in combination computer applications, in other words it should emphasize the development of partial in-class teaching to take charge of the learners.

A logic of hybridization is thus formulated for the Accroche! platform. In this regard, the suggested bimodal formula (classroom-Internet) could anticipate **in-class activities,** in addition to organized activities that would be adaptable to a population with low literacy levels. In other words, this hybrid mode could **suggest** strategies including in-class activities in particular for the start-up of on-line activities and at different key moments.

In fact, Désilets and Coulombe indicate that certain "strategies are suggested to stay in contact with the group and with the trainer: for example, establishing a group meeting at the outset of training and at several other times in the course of the process . . . etc." [translation]

- There are additional examples of planning physical or hybrid or bimodal meetings that could be used to start up groups, explain activities to be performed, and make a progress report on activities during the process for beginners in phases 1-2.
- For learners enrolled in phases 3-4, it is a matter of pursuing the hybrid mode, since in-class meetings must be anticipated in order to ensure monitoring of learning and to lessen the feelings of isolation.

Learners felt the traditional needs **for supervision and follow-up**. Here are a few comments on the disadvantages that learners pointed out following the study:

- *Lack of personal contacts (no friends, no teachers)*
- *Lack of precise explanations*

Despite the flexibility and openness that characterizes new forms of instructional design, the issue of **supervision and follow-up** of the learner remains a central one. Indeed, the Accroche! platform does not anticipate the whole state of knowledge in which the learner is situated at any given moment in his or her progress toward achieving competence. Yet hopefully the Accroche! site will provide more supervision for students enrolled in phases 1 and 2 in order to assist and support learners in their learning process, to help them overcome learning difficulties in order to allow them to attain the objectives targeted in the on-line activity—in this way, learners can become the agents of their own training and develop their autonomy.

Learners need supervision that is more or less structured according to their mastery of the subject, their autonomy and their knowledge. Supervision also improves perseverance in studies, and we must accept that **devoting a significant portion of resources** to guide targeted learners in their learning toward success is a necessity.

ACCROCHE! as it is	ACCROCHE! as we want it to be
- It is currently based on an "on-line activity" formula, completely independent of learners' learning paths, with no relation to the in-class training that learners receive.	- Oversee development that would foster a hybrid training formula. This could combine follow-up on concepts covered in class with the path followed in the virtual environment.

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10. M. Désilets, I. Coulombe (June 2003). [translation]

Innovative approaches

Many teachers commented on the weakness of the detailed diagnostics produced by the "*assess and visualize the list of correctly or incorrectly answered questions" system*[11] for each of the learners. In other words, the evaluation of the learning progress consists in keeping a **record of individual progress** in learning. Thus, if the evaluation of learning has appropriate technological support, this could help teachers to diagnose the strengths and weaknesses of learners and to monitor their progress.

The Accroche! platform should offer teachers feedback and information about the quality of answers produced following each of the questions during exams. The platform already generates feedback on correctly or incorrectly answered questions during on-line activities. From an instructional perspective, this information could form an **extension of learning** and be used as a **diagnostic tool** in order to visualize the progress for steps attained or not attained during exams. As previously indicated, this information could be integrated into the learner's portfolio.

- However, we recommend developing a summary table for "**the successfully completed phase or the current phase**" under the heading "Dossier élève" (Student File) on the Accroche! site in order to verify the progress of each learner and to determine the process to be undertaken with each learner.

ACCROCHE! as it is	ACCROCHE! as we would like it to be
- During exams, neither the teachers nor the learners have access to incorrectly answered questions. Only the result is provided.	- Allow the teacher to see the questions where the student made mistakes. At the very least, the teacher should have access.

The innovative instructional scenarios on the Accroche! platform provide opportunities for monitoring the cognitive progress of the learner and allow an exchange of information, **responses, and feedback** between the learner and the system or the "on-line teacher."

- The question is open as to whether or not innovative approaches to learning measurement and evaluation such as authentic evaluation or portfolio-based evaluation are relevant. Since the **methods for operationalizing these evaluation processes are still experimental,** the teaching practitioner community is reflecting on an appropriate instrument that would be useful for monitoring learning. For this reason, it would be important for a team of teachers to examine **how to develop the portfolio** in the Accroche! platform instead of leaving its development entirely up to the designer. Collaboration is necessary. The **Service national du RÉCIT - General Adult Education** could assume a coordinating, discussion and collaborative role among all the trainers in the province.

Briefly, the question is not "are we learning more or better" but rather "does the learning experience change with these new media?" (Charlier, 1999, p. 81). From this standpoint, learners are no longer people being taught, but people who learn actively, through exploration and reflected action in order to act on the functioning of pre-designed content and opportunities for exchanging with the "On-line teacher" *and the* "Associate teacher*." Regardless of the nature of the connection the learner has with a tutor, either the "On-line teacher" or the "Associate teacher,"* learners registered on the Accroche! site want more support in their learning process. Teachers require the ability to personalize the monitoring of their learners. **The portfolio remains the reference tool** for obtaining information on the evolution of the learner's comprehension of the subject studied.

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11. Table of technical and pedagogical elements (Accroche! as it is). [translation]

ACCROCHE! as it is	ACCROCHE! as we want it to be
- The Accroche! portfolio offers rather limited opportunities for follow-up.	- Improve the portfolio by adding functionalities for personalized paths that the teachers can assign to their learners. Draw on the structure of the "GUIDE ET ACTIVITÉS ANDRAGOGIQUES" on the ALPHA-TIC site and the "Guide visant le développement des compétences génériques en lien avec le monde de l'emploi." They suggest relatively simple management of learners' learning paths that could be adapted to ACCROCHE!.

- The "On-line teacher" concept is interesting but it has come to include a second alternative, the "Associate teacher." This functionality was developed over the course of the year. Teachers in general adult education and community centres automatically take charge of learnings belonging to their centres. The "On-line teacher" will be maintained for learners accessing ACCROCHE! on their own, who are not connected to a general adult education or community centre.	- Recruit teachers who wish to collaborate in providing support to learners through the "On-line teacher."

Principle 4: Provide more expertise in distance education in literacy training, and access to high-quality materials

*Principle 4 focuses more on the need for **training for trainers** and on the need for support related to computer and technological material and instructional material adapted to distance education.[12] However, teachers want to participate in the development of training **models** based on distance instruction. Here, we address the importance of high-quality learning materials adapted to distance education in literacy training.*

Learning material and learning interfaces

The tools that characterize the information and communications society calls on us to more closely examine instructional scenarios, particularly interventions relating to all the on-line activities on the Accroche! site. We are seeking new methods of promoting interaction between the teacher and peer-learners.

The idea that the **learner's interest is what drives learning** does not characterize reward through marks, but the pleasure of resolving a real problem that the learner addresses. It may apply to multimedia tools: the opportunities for differentiated instruction that this tool offers provide precious assistance in individualizing learning paths.

- From this perspective, transformations will alter current practices in developing **instructional scenarios** because they involve a shift from a mechanical approach in which each element is determined in isolation to an approach in which **the interdependency of the elements** is not only sought after but valued.

Teachers must be able to evolve in **virtual workspaces** that are specifically suited to and useful to their teaching. From this viewpoint, every member of the Accroche! team strives to attain his or her own objectives by seeking innovative ideas in order to exchange, interact and work together to create innovative, shared resources. Each teacher needs to formulate his or her needs in a concrete way.

- The originality and the strength of ICTs and on-line activities seems to lie, in terms of academic instruction, in the opportunity for substituting distance interactions outside the classroom for in-class interactions, i.e. interactions that go beyond the spatial and time constraints of the classroom. This does not only concern on-line courses, but also a distancing of teaching.

New interfaces for the Accroche! platform should take into consideration the profiles of the targeted learners. In order to make effective use of multimedia and distributed learning environments, the connection should be made between the **technological possibilities, the competencies and types of learners**.

We should indicate that the evolution of the concept of the Accroche! site interface allows us to underscore three of its characteristic features.

- The interface is the place and the source of information that facilitates communication between the system and the learner. In fact, at all times, the learner is in equilibrium between acting and reacting, between receiving course notes and extracting information, and between answering and asking questions.

- The interface is a set of **physical or cognitive** tools designed to help the learner perform and accomplish activities on-line, and soon after, tasks and shared projects.

- The Accroche! site interface calls for the use of several elements, such as methods of adapting and the ability to visualize objects. The **insertion of animated sequences** is an appealing, captivating contribution for learners enrolled in phases 1 and 2 in on-line activities. This group has major difficulties with reading. Narration and images are essential for their learning.

The Accroche! platform interface is designed to help learners perform an on-line activity. For this reason, we recommend **three maximum levels** of **depth**. In this regard, the rule of three clicks must be respected, i.e. that the learner should not have to click more than three times to get to the information he or she is seeking. A compromise should be found between the number of clicks for finding information and the number of navigational options that can be displayed on the same page.

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12. M. Désilets, I. Coulombe (December 2003), 11.

ACCROCHE! as it is	ACCROCHE! as we want it to be
- Too many clicks to move from one question to the next.	- Review the presentation of questions in order to facilitate navigation among them.
- Lack of animated and narrated sequences.	- Add animated and narrated sequences.

A didactic transposition through a media transposition offers a new perspective on designing instructional content. In this regard, the media-based, interactive instructional environment offers **new avenues for reflecting on pedagogy.**

It is not a matter of first choosing the technology to try to introduce it into a learning context, but rather to model the technological tool based on the needs of learners and the targeted objectives and to attempt to translate these through technology into the reality of an on-line course.

To determine the training model and the conditions for creating it, it is essential to consider the opinion of learners. *Here are a few advantages that learners indicated:*

- the Accroche! platform provides "*Instant correction*" or immediate feedback and immediacy in their own learning process

- ease of participation is a "Great learning alternative / It forces me to clearly express what I think / Sometimes a computer is more patient than a teacher"

Lastly, the approach tested in the on-line course has a positive assessment. In general, the Accroche! platform got positive comments from learners, and the following should be emphasized:

o 80% recommend Accroche! to other students

o 77% like doing exercises on the Internet

Thus, the Accroche! site aims to give as much power as possible to learners as they progress in their path. There are no obligatory texts or on-line learning activities on Accroche! However, these activities take the form of exercises, and the choice, content, preparation and facilitation can be negotiated between learners and with the tutor and the "Associate teacher."

Principle 5: Increase the potential of distance education and keep up with technological change

Ask interested organizations to choose simple tools that they can master themselves; promote shared use of a tool that can be adapted to various realities so that several organizations do not spend a fortune on purchasing similar tools.[13] *Develop a culture and practice in this field and suggest training models.*[14]

Indeed, computer technology is in the process of changing the relationship to space in knowledge acquisition pedagogy. The organizational culture and the individuals that make it up must modify their organizational approaches and their instructional processes.

- This means that the roles of teacher and learner, which can only be transformed slowly, must change where **school organizational cultures** including school cultures, promote it. In such settings, the results provide indicators on the competencies that should be developed.

Note that the on-line activities placed on the Accroche! platform are bringing about **changes in traditional teaching practices** and foster continuous progress in the integration of ICTs into teaching practice. In this regard, the teaching model suggested in this testing aims above all at practice-based learning in the "on-line activities" site. Moreover, more attention should be paid to instructions for supporting learners in their activities.

In other words, these instructions are the connections between the course content and the distance learner. They guide their actions and help to understand how they will engage in, construct and interpret instructional situations.

From this viewpoint, we must rethink our **supervision models and practices,** which are likely influenced by in-class instruction. In particular, we should be finding ways of helping learners to better define their needs for assistance (their limits and competence) and better identify resources.

- We want to develop learning products that are no longer centred on the teacher but learning modules that are centred on the learner.

- Use an approach making effective use of collaborative learning. As a matter of fact, it is through a set of exchanges between "actors through successive and/or simultaneous actions and reactions," [translation] according to Mucchielli and Guivarch (1998), that interrelationships between them can be established in **group action,** thanks to the communications tools available on the Internet.

Provision should be made to ensure administrative support for the development of on-line activities and to maintain support and supervision via the "On-line teacher" and the "Associate teacher." Thus, in terms of instructional significance, setting up multidisciplinary teams for the Accroche! site is essential.

- It is important and essential that principals participate in the development of this dossier, especially in the school boards as indicated by those consulted during the study.[15] The pedagogical importance of supervision and its budgetary burden fully justify the interest of institutions in the effective implementation of supervision. **Support from the school administration**, the school principal and collaboration among teachers are very important factors in the integration of new technologies in the classroom.

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13. M. Désilets, I. Coulombe (December 2003).
14. M. Désilets, I. Coulombe (June 2003).
15. M. Désilets, I. Coulombe (December 2003).

Management and provincial coordination of the Accroche! site activities

This computerized, interactive techno-pedagogical environment requires coordination that should be controlled by the Service national du RÉCIT - General Adult Education, supported by regional SitSat representatives and literacy actors in the regions. This kind of management aims to prevent redundancy in the development of activities on the Accroche! site.

ACCROCHE! as it is	**ACCROCHE! as we would like it to be**
- Management of the site is currently the responsibility of one person: Maryse Ouimette.	- A regional structure, controlled by a national structure, could be implemented in order to ensure efficient management of the site. Given the scope of the undertaking (throughout Québec), it is essential to prioritize this approach.

Principle 6: Develop a culture of continuing education

Literacy training in an on-line course mode must be developed in connection with a culture of continuing education. Literacy training in a distance education mode must be developed in connection with the promotion of a culture of continuing education, particularly with access to ICTs. We have to create conditions so that the training needs and the importance of the administration's participation is understood in the school boards.[16]

Continuous training

"One of the most significant principles affecting essential conditions is training and support for teachers."

According t o t he gui delines of t he S ervice nat ional d u R ÉCIT - General A dult Education, "Professional development for trainers will help:

- Make them aware of new instructional approaches required in an on-line training context

- Improve instructional materials developed and verify the behaviour of learners who benefit from this kind of training"[17]

Since i nstructional appr oaches and t echnology ar e c onstantly ev olving, i t i s i mportant t o pl an **professional development** for t eachers. P rofessional dev elopment s hould be di rectly offered t o t eachers i n t heir s ettings and take new instructional approaches into consideration.

We know that teachers are pedagogues immersed in daily practice and that instructional innovation requires an anthropocentrist[18] (student-based) rather than a *technocentrist* (technology-based) vision.

A number of conditions must be met to ensure the successful integration of ICTs and use of the Accroche! site.

- It is essential to set up multidisciplinary teams to ensure the participation of all stakeholders in the community. Cooperation and collaboration as well as the sharing of experiences are crucial elements in an increasingly computerized context.

- They must be allowed time to become familiar with techno-pedagogical environments in order to discuss new instructional practices that are consistent with new technologies and ensure that there is support from the administration.

But bas ically, i nstructional change i s not pos sible unl ess bel iefs c oncerning t eaching and l earning c hange (Haymore S andholtz, J ., Ringstall, C ., O wyer, D .C., 1997). T his c ontext pr esupposes t he t ransformation o f deeply r ooted bel iefs, i .e. c lassroom ac tivities, t eacher and s tudent r oles, educ ational goal s, c oncepts o f knowledge and measurement of the student's success.

When " on-line" ac tivities ar e anal yzed, t he vast majority of t hem c oncern t he us e of m edia equi pment t o complement t he t eacher's a ction and l ess frequently, t o s upport t eaching ac tivities. T hey r equire us ers to "cultivate" the imagination, and to come to grips with interactivity, immediacy, virtual reality and the diversity of available information and resources.

- From this v iewpoint, in o rder for pr actitioners to c hange t heir instructional or educ ational pr actices, they must be abl e to imagine, project and ex perience truly beneficial experiences. They must be pr ovided with models t hat c an s upport t hem as t hey des ign i nstructional m aterial. T his i nvolves of fering t hem, **in addition to an on-line print guide** (currently a vailable), **the option of a video or screen capture for trainers**.

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16. Désilets M., Coulombe, I. (December 2003). [translation]

17. RÉCIT summary of IFPCA financing application 2004-2005. [translation]

18. Robert Bibeau, L'élève rapaillé http://edumedia.risq.qc.ca (1997)

ACCROCHE! as it is	ACCROCHE! as we want it to be
- The site does not offer good examples of instructional uses that could guide teachers who want to develop activities.	- Drawing on the ZOOM site, it would be a good idea to produce videos showing examples of the successful use of the Accroche! site for instructional purposes.

Increasingly, the adage " one c an nev er l earn enough" w ill be come a r eality in a " cognitive s ociety" in w hich people will engage in lifelong learning. But is there anything new about this adage? What has changed is the desire to establish and build a model of society that integrates continuing education and training as an essential component of its functioning.

Chapter III
Beyond Accroche!

This change, expressed through the fragmentation of educational structures, increasingly wider access to education and the merging of time devoted to training, work and leisure are nothing compared to what awaits us in tomorrow's globalized society.

To get ready for tomorrow's "cognitive society," we need to rethink education and draw on ICTs. From this viewpoint, diversity will not only be found in training models but also between training and information, as well as in everything that encourages the acquisition of knowledge. Moreover, the methods, means and concepts that will contribute to adapting our educational systems in order to address the issues of the next millennium will also allow us to act on the future.

We should consider how reflection on the Accroche! platform could inspire the future development of all training programs that integrate ICTs.

Research on models

Tomorrow's training models should **distance themselves from linear models** and allow multiple access to content and resources, such as shared data banks, **learner communities, virtual communities** (A. Taurisson, 2000) and **communities of practice**.

It is within the convergence of media, and cognitive and interconnective immersion that learners can fulfill their need to act in the very moment of learning, by interacting with media and media content. Interaction cannot be limited to free **nonlinear** access to information nor to the various options and choices available to the learner. Hopefully, all training platforms like Accroche! will gear their development toward the structural organization of the interface so that learners have a **sense of control** over their learning process.

In this regard, learners who are in control of their learning will be manoeuvring in an instructional venue that is no longer limited to a classroom, or even a team of learners, but one that extends to a variety of resources and people. Hence the concept **of a community of learners** is possible even now.

A different view should be taken of on-line activities. The Internet is indeed a tool considered to be a dynamic environment in which the learning context is different from in-class learning. According to the authors Gwyn, 1988; Jonassen, Meyer and McKillop, 1996; Kozman, 1991; Selwyn, 1999; and Nokuri, 1998, this teaching resource is not simply to learn, but rather a tool for learning *with*.

Toward virtual learning environments

In these virtual learning environments, the school becomes a decompartmentalized place, which in a sense *"unschools"* instruction which no longer needs to take place in institutional settings with pre-determined schedules but can be carried out by taking into consideration personal demand for training.

However, "before **virtual learning environments** can be established in our educational settings, we need to work on taking ownership and meeting three challenges:

- move in the educational direction that will help us make learning our main issue instead of focusing on teaching as a priority
- adopt new instructional design methods that are adapted to the design of virtual learning environments
- master new technical skills to implement user-friendly environments that are easily disseminated, maintained and managed (F. Henri and K. Lundgren-Cayrol, 2001)" [translation]

The Accroche! platform and any other future platforms must take into consideration these challenges and show constant concern for improving the interface and the learning process in order to adapt to new technologies and instructional methods that are constantly evolving.

Toward a renewed concept of design

With **the introduction of collaborative technology** (teleconferencing, net works) that gi ve r ise t o a m ore complex and diversified context of exchange and interaction, the role of a platform's interface will be to act as a point of converging information and tools that will help learners carry out group projects or activities. Thanks to these technologies, it is now possible to create environments with no constraints in time or space.

This c oncern m ust f orm an i ntegral par t of a **renewed concept of design**. T he n eed f or a new m odel f or structuring information for the purposes of learning in a network in enriched environments will be increasingly predominant. By providing learners with processing tools capable of modelling, they will be abl e to understand their actions and decisions.

- All platforms must be concerned with **supervision and support, which learners often require, and also provide feedback** on l earning. We s hould em phasize t hat l iteracy t raining c lientele r equires hi ghly personalized supervision and follow-up. We must not only provide learners with cognitive and metacognitive s upport, but al so em otional and m otivational s upport. F rom t his v iewpoint, s upervision i s basically c arried out t hrough t he i ntervention of r esource per sons w ith t he l earner i n ac tivities p lanned during the design phase or through services—which must be supported by a team of trainers—provided at the request of learners.

Reuse of materials and resources

The architecture of a site like Accroche! must promote the reuse of existing instructional materials. To this end, the teacher-designer could decide to design only one or two sets of material for a course while reusing existing materials tested in the past (G. Paquette, 2002). In other words, this concept allows different teachers to create teaching materials that others may reuse and adapt to their teaching needs. We should not be r einventing the wheel. The dissemination of content via the Internet and the ease with which it can be found using s earch engines dem onstrates t hat even a l earning f ocus c an be dev eloped b y a gr eat many t rainers. I nstead of developing the same focuses, there is reason to share them and de velop new ones. In a context of significant budgetary c onstraints, c ollaborating and ex changing a mong t rainers i n t he dev elopment of i nstructional material should be a priority.

Videoconferencing tools

Videoconferencing t ools s uch as B reeze w ill s ignificantly modify t raditional f orms of t eaching. A ny t raining platform like A ccroche! must consider how these tools can be integrated into the learning process. The successful use of the platform depends on this. These tools do not only serve people in remote regions. They will make it possible to create virtual groups that would never have been possible in the past. A centre that only has three l earners i s not nec essary v iable. However, if w e group t hem t ogether w ith ot her c entres t hat al so have a l imited nu mber of l earners, t hen w e w ill hav e c reated a g roup of v iable s ize. E xchanges and collaboration will be greatly improved as a result.

Briefly, the computer environment and asynchronous and synchronous communication tools become indispensable at a given point in a project or activity when specific adjustments must be made. When decisions must be m ade, **asynchronous and synchronous modes** are t he onl y m odes t hat of fer t he r eactivity and facility required (Livet, 1994 in Boullier, 2001) for fostering exchanges between learners and between learners and t eacher-tutors i n on -line c ourses. In f act, c ommunication m ethods ar e resources t hat facilitate communication and di verse forms of interaction in delayed time (asynchronous) or in real time (synchronous) between actors and learners.

Toward the use of free software

In principle 4, we talked about the importance of **access to varied, quality, inexpensive learning materials.** A v ariety of t ools ex ist on t he Web, for s haring, ex changing, c ollaborating and w orking i n a net work. I n t he educational s etting the t rend i s to us e "copyright f ree" software. In ant icipation, we c an t ake an i nventory of freeware programs, or free openware, or free or low-cost software solutions (CLEM, 2004).

Some school boards, in collaboration with the Centre de recherche informatique de Montréal (CRIM), have developed the MILLE project (Modèle d'Infrastructure Libres de droits en Éducation).[19] Platforms like Accroche! do not currently meet this standard. From a viewpoint of long-term development it is important to consider the possibility of conforming to it.

Conclusion

"On-line activities" available on a variety of platforms such as Accroche! contribute to the evolution of the training process, both in terms of researching resources and with respect to management tools or evaluation tools. The teachers, learners and managers who use them are responsible for ensuring that they evolve. The place and role of on-line course teachers involve proposals concerning learning content that is contextualized according to the specific needs of learners during their learning process. The needs that learners and teachers demonstrate can orient the organization and structure of content.

The instructional process of introduction to the Accroche! site, carried out through training sessions in all of Québec's regions and the gathering of comments from teachers and learners, allowed us to prepare this guide of recommendations. We hope that it can answer the questions that the literacy training community is asking with regard to on-line and distance education.

By considering ICTs as instructional allies of literacy training, the Service national du RECIT - General Adult Education, its SitSat network, the Commission scolaire de Laval and all its partners are setting out to meet a true challenge.

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19. MILLE, Bulletin d'Information du Modèle MILLE, congrès l'AQUOPS 2005.

Appendixes

Appendix A: Training Schedule

<table>
<tr>
<th colspan="4">Planning of the Accroche! training schedule
Winter 2005</th>
</tr>
<tr>
<th>SITSAT</th>
<th>Date and place of training</th>
<th>Number of participants</th>
<th>Responder</th>
</tr>
<tr>
<td>SITSAT, Laval, Laurentides and Lanaudière</td>
<td>January 13-14, 2005
Laval
April 2005 - Joliette</td>
<td>10 people</td>
<td>Maryse Ouimette</td>
</tr>
<tr>
<td>SITSAT, Abitibi-Témiscaminque</td>
<td>January 20-21, 2005
Val d'Or</td>
<td>20 people</td>
<td>Pierre Sauvé</td>
</tr>
<tr>
<td>SITSAT, Côte-Nord</td>
<td>February 3-4, 2005
Sept-îles</td>
<td>7 people</td>
<td>Pierre Sauvé</td>
</tr>
<tr>
<td>SITSAT, Capitale-Nationale and Chaudière-Appalaches</td>
<td>February 10-11, 2005
Québec</td>
<td>11 people</td>
<td>Maryse Ouimette</td>
</tr>
<tr>
<td>SITSA, Montérégie</td>
<td>February 15-16, 2005
Brossard</td>
<td>7 people</td>
<td>Pierre Sauvé</td>
</tr>
<tr>
<td>SITSAT, Mauricie and Centre-du-Québec</td>
<td>February 17-18, 2005
Trois-Rivières</td>
<td>14 people</td>
<td>Pierre Sauvé</td>
</tr>
<tr>
<td>SITSAT, Saguenay-Lac-Saint-Jean</td>
<td>February 24-25, 2005
Jonquière</td>
<td>19 people</td>
<td>Pierre Sauvé</td>
</tr>
<tr>
<td>SITSAT, Montréal</td>
<td>February 28 and March 15, 2005
Montréal</td>
<td>8 people</td>
<td>Maryse Ouimette</td>
</tr>
<tr>
<td>SITSAT, l'Outaouais</td>
<td>April 25, 2005
Gatineau</td>
<td>10 people</td>
<td>Maryse Ouimette</td>
</tr>
<tr>
<td>SITSAT, Bas-Saint-Laurent and Gaspésie-Îles-de-la-Madeleine</td>
<td>May 4-5, 2005
Matane</td>
<td>22 people</td>
<td>Pierre Sauvé</td>
</tr>
<tr>
<td>SITSAT, l'Estrie</td>
<td>May 12-13, 2005
East-Angus</td>
<td>5 people</td>
<td>Pierre Sauvé</td>
</tr>
</table>

Appendix B: Teacher evaluation questionnaire

Evaluation of the Accroche! site – www.accroche.qc.ca
DAY 1

Content	Comments
1. Detailed information: scope of the site	
2. Logic for the organization of information	
3. Relevance of outside links: quality of pointers	
4. Quality of language	
5. Usefulness and relevance of illustrations or animated sequences	
6. Clear, identified sources of information	
Navigation	
7. Ease of navigation (to and from, back to home page, site map)	
8. Easy understanding of orientation buttons	
9. Quality of the research tool indexing site content	
10. Download speed from the site and various pages	
Visual presentation	
11. Site *design* and colours	
12. Legibility of the text	
13. Speed of illustration change	
14. Speed for loading the site and various pages	
Other questions	
15. Is the public well targeted?	
16. Does the subject or general theme summarize the site?	
17. Can the target public easily access the site?	
18. The site's visual and audio quality?	
19. Is the site's goal clearly stated?	

OTHER COMMENTS:

Teacher evaluation questionnaire

Evaluation of the Accroche! ADMINISTRATIVE site
DAY 2

Content	Comments
1. Ease of access to the administrative site	
2. Logic of the module organization	
3. Autonomy of the course module management	
4. Teacher's motivation for observing immediate results	
5. Navigation between the Cybergénération site and Accroche!	
6. Relevance of the on-line Help Guide	
8. Time for mastering the tool	
9. In-class use of the Accroche! site with teachers	
10. Suggestions for improving the Accroche! site	
11. Activity sharing and exchanges	

OTHER COMMENTS:

Appendix C: Learner evaluation questionnaire

This questionnaire is available at the following address: <u>http://www.cssmi.qc.ca/sondage-accroche</u>

Testing the ACCROCHE! site

Hello! You are asked to answer a questionnaire so you can tell us your opinion about the use of the ACCROCHE! site.

Your comments are important to us because they will be used to make the improvements you would like to see on the site. It will take about fifteen minutes to complete this questionnaire.

Thank-you for your cooperation,

The ACCROCHE! site design team

HERE ARE A FEW QUESTIONS THAT ALLOW US TO IDENTIFY YOUR PROFILE.

Your gender

☐ Male

☐ Female

Your age group

☐ 15-24 years

☐ 25-39 years

☐ 40 or over

Your region

☐ Abitibi-Témiscamingue Jamésie`

☐ Bas-St-Laurent Gaspésie Iles-de-la-Madeleine

☐ Capitale-Nationale Chaudière-Appalaches

☐ Côte-Nord

☐ Estrie

☐ Laval Laurentides Lanaudière

☐ Mauricie Bois-Francs

☐ Montréal

☐ Montérégie

☐ Outaouais

☐ Saguenay–Lac-Saint-Jean

Name of your training centre

Name of your teacher

Your name (optional for learners)

You use the INTERNET . . .

☐ Every day

☐ A few times a week

☐ A few times a month

☐ Hardly ever

You use the INTERNET . . .

☐ At home

☐ At the training centre

☐ At both places

◉ other: [   ]

The INTERNET connection at home is . . .

☐ High speed

☐ Slow

☐ Varies day to day

☐ I do not use the INTERNET at home

The INTERNET connection at the Training Centre is . . .

☐ High speed

☐ Slow

☐ Varies day to day

☐ I do not use the Internet at the Training Centre

THE FOLLOWING QUESTIONS WILL ALLOW YOU TO PROVIDE YOUR COMMENTS ON THE ACCROCHE SITE
1 - What activity or activities did you use for testing? (Check one or more boxes)

☐ Français-Lecture - Step 1

☐ Français-Lecture - Step 2

☐ Français-Lecture - Step 3

☐ Français-Lecture - Step 4

☐ Mathematics - Step 1

☐ Mathematics - Step 2

☐ Mathematics - Step 3

☐ Mathematics - Step 4

☐ Other: Please explain

2 - It is easy to navigate the site.

☐ Strongly agree

☐ Agree

☐ Disagree

☐ Strongly disagree

Comments and suggestions for improving NAVIGATION on the site:

3 - I like the visual aspects of the site.

☐ Strongly agree

☐ Agree

☐ Disagree

☐ Strongly disagree

Comments and suggestions for improving the VISUAL aspects of the site:

4 - I like doing exercises on the INTERNET.

☐ Strongly agree

☐ Agree

☐ Disagree

☐ Strongly disagree

Comments:

5 - If I had a choice I would do all my courses on the INTERNET.

☐ Strongly agree

☐ Agree

☐ Disagree

☐ Strongly disagree

Comments:

6 - My teacher had to help me navigate on the site.

☐ Never

☐ Seldom

☐ Often

Comments:

7 - What did you like MOST about your experience with ACCROCHE!?

8 - What did you like LEAST about your experience with ACCROCHE!?

9 - I would recommend the use of this site to other students.

☐ Strongly agree

☐ Agree

☐ Disagree

☐ Strongly disagree

10 - What ADVANTAGES do you see in INTERNET courses?

11 - What DISADVANTAGES do you see in INTERNET courses?

Appendix D: Summary of Accroche! technical and pedagogical elements vs. the guiding principles

This summary comprises all of the interventions that should be carried out to allow the Accroche! platform to respond to the needs expressed by literacy stakeholders. The right-hand column indicates the actions feasible for 2005-2006.

ACCROCHE as it is	ACCROCHE as we want it to be	Guiding principles	Feasible in 2005-2006
• The TESTIMONIALS section should be retained and developed. They are very interesting both for teachers and learners. Learners recognize themselves in the comments and they see that "they are not alone." • The testimonials humanize and personalize the site. • The video medium is an excellent way of animating the site.	• Develop new testimonials covering the greater diversity of the literacy training clientele.	Principle 1 Increase access to and participation in training services.	• yes
• Games add interest. They take the site beyond its academic purpose. The links to entertaining and educational games are the most appreciated.	• Games should be classified according to categories that need to be defined. When there are too many, they are too hard to find.	Principle 2 Consider the constraints for targeted learners.	• Yes
▪ No forum and no moderator,	▪ Implement a forum and moderator-facilitators.	Principle 2 Consider constraints for targeted learners.	• Yes
• During exams, neither teachers or learners have access to incorrectly answered questions. Only the result is made available.	• Allow the teacher to see the questions where the student made mistakes. At the very least, the teacher should have access.	Principle 3 Combine distance education with sufficient support.	• Yes
• Currently it is an on-line activity, entirely independent of the learner's schooling, with no connection to the in-class training that the learner could receive.	• Oversee the development of the platform which could foster a hybrid training formula. This could combine follow-up on concepts covered in class with the progress in the virtual environment.	Principle 3 Combine distance education with sufficient support.	• To be determined
• There is a lack of structure in the presentation of activities. With over 60 activities, it is hard to sort things out.	• A structure for ACTIVITIES has been suggested and remains to be validated.	Principle 2 Consider the constraints for targeted learners.	• Yes
• The "On-line teacher" concept is appealing but it shifted to the "Associate teacher" alternative. This functionality was developed over the year. Teachers in adult education and community centres automatically take charge of the learners belonging to their centre. The "On-line teacher" will continue to be available to ACCROCHE! learners who are not connected to an adult education centre or community organization.	• Recruit teachers who wish to collaborate in supporting learners through the "On-line teacher."	Introduction Principle 3 Combine distance education with sufficient support.	• Yes

ACCROCHE as it is	ACCROCHE as we want it to be	Guiding principles	Feasible in 2005-2006
• Management of the site is currently supervised by one person: Maryse Ouimette.	• A regional structure, controlled by a national team, could be implemented to ensure effective management of the site. Given the scope of the undertaking, (throughout Québec), it is essential to prioritize this approach.	Principle 5 Increase the potential of distance education and keep up with technological change. Principle 6 Develop a culture of continuing education.	• Yes
• Multimedia and the use of "Breeze" video clips.	• To be used, but in a form that can be used on a different server. Perhaps requires the use of another platform than Breeze, such as "Captivate," recently acquired by the Service national du RECIT - General Adult Education.	Principle 2 Consider the constraints for targeted learners.	• Yes
• The Accroche! portfolio offers limited follow-up.	• Improve the "portfolio" by adding functionalities for personalized paths that the teacher can assign to learners. Draw on the ALPHA-TIC site, from the structure of the "GUIDE ET ACTIVITÉS ANDRAGOGIQUES" on the ALPHA-TIC site and the "Guide visant le développement des compétences génériques en lien avec le monde de l'emploi." There is a relatively simple management path for learners that could be adapted to Accroche!.	Principle 2 Consider the constraints for targeted learners. Principle 3 Combine distance education with sufficient support.	• Yes
• Too many clicks required to access questions. • Insufficient animated sequences and narration.	• Review the presentation of questions to facilitate navigation between questions. • Add animated sequences and narration.	Principle 4 Provide more expertise in distance education in literacy training, and access to high-quality materials.	• Yes
• The "on-line course" does not promote teacher-student relationships.	• Develop methods to ensure effective, interesting, motivating exchanges between teachers and students.	Principle 2 Consider the constraints for targeted learners.	• To be determined
• The site does not offer suitable examples for instructional uses that could guide teachers who wish to develop activities.	• Drawing inspiration from the ZOOM site; videos could be produced, showing examples of successful pedagogical use of the Accroche! Site.	Principle 6 Develop a culture of continuing education.	• To be determined

Distance Education in Literacy for the Development of a Hybrid Approach

Appendix E: Summary of the analysis of guiding principles

Guiding principles	Key elements	Strategies
Principle 1: Increase access to and participation in training services	- Distance education equipment. - Previously acquired abilities; autonomy of targeted learners (autonomy, competencies related to writing and tools . . .).	- Organization of distance education equipment; geographically distanced, but intellectually connected through the on-line activities of the Accroche! site. - Previously acquired abilities; autonomy. - Multisensory nature in the TESTIMONIES section.
Principle 2: Consider the constraints for targeted learners	- Reduce the isolation of adult learners and practitioners. - Facilitate contacts between teachers and adult learners. - Improve access to varied, quality learning material. - The importance of targeting learners, their needs, family, financial, time, scheduling and travel constraints are just as important in rural and urban settings.	- Reduce isolation. - Community of practice. - Motivational aspects; gratification/Accroche! award an attestation at the end of each step. Games. - Facilitating contacts: support for learning "On-line teacher" "Associate teacher." - Virtual office portfolio. - Relational interactions: asynchronous tools, forums/e-mail appreciated by learners. Other: the whiteboard, "Breeze" capsules, videoconferencing, etc. - Categorizing activities—user-friendly classification: suggested structure for activities.
Principle 3: Combine distance education with sufficient support	- Distance education in literacy training is addressed to a population ill at ease with writing, lacking autonomy in a self-training process. - Instructional supervision, direct, continuous contact between students and tutors, learners.	- Hybrid system - Supervision and monitoring. - Recruitment of the "On-line teacher." - Innovative approaches/diagnostic-feedback. - How to develop the portfolio.
Principle 4: Provide more expertise in distance education in literacy training, and access to high-quality materials	- Training models: distance instruction; access to resources.	- Training models; distance instruction /interdependency of elements /instructional scenarios. - Virtual workspaces. - Evolution of the interface/insertion of animated sequences/level of depth: 3 clicks. - New avenues for reflection in the field of pedagogy.
Principle 5: Increase the potential of distance education and keep up with technological change	- Suggest distance education models.	- Models and practices. - Culture of the organization/support from the school administration. - Provincial management and coordination of the site's activities.
Principle 6: Develop a culture of continuing education	- Literacy training in distance education mode must be developed in connection with the promotion of a culture of continuing education, particularly with access to ICTs. Create conditions so that training needs inspire individuals and groups.	- Continuous training. - Training for teachers and trainers. RÉCIT guidelines.

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