

CHAPTER 5

5.1 Introduction

5.2 Beliefs Related to the Advantages to the Use of OLEs

5.2.1 Resources and Information

5.2.2 Communication and Collaboration

5.2.3 Real-World Learning

5.2.4 Motivation

5.2.5 Learning

5.2.6 Teaching

5.2.7 Summary

5.3 Beliefs Related to the Challenges to Use of OLEs

5.3.1 Time and the Curriculum

5.3.2 Training, Support and Vision

5.3.3 Access and Equipment

5.3.4 Control and Monitoring

5.3.5 Students

5.3.6 Online Learning Environments

5.3.7 Summary

5.4 Conclusion

CHAPTER 5

Landscapes Without Bearings: Presentation of the Findings

The classroom is a place where order prevails. The infusion of information and communication technologies (ICTs) creates a zone of uncertainty for both teachers and learners, engaging them in a process of risk and exploration for some time to come. (Bracewell et al., 1998)

5.1 Introduction

This chapter presents a synthesis of teachers' beliefs about teaching and learning French in OLEs. The focus of this chapter is on describing the beliefs and, as such, considers research question 1: What are some of teachers' beliefs about teaching FSFL in online learning environments? The aim is to present the beliefs without extensive interpretation or analysis. The following chapter, Chapter 6, will present an interpretation and more extensive analysis of the findings.

The analysis of the beliefs involved coding using key words. As a result of this coding, 12 categories were established. These 12 categories represented 12 topics into which all of the data could be grouped. However, among these categories, it was apparent that there were differences and similarities between each of the 12 categories. While some categories grouped data which viewed use of OLEs in a positive way and expressed their advantages, other categories appeared to group data which emphasized the challenges related to the use of OLEs. The next step therefore involved regrouping each of the 12 categories into two broad categories: beliefs that emphasize the advantages of OLEs for the teaching and learning of FSFL; beliefs that emphasize the challenges related to the use of OLEs. Although there was no attempt whatsoever to group the categories evenly, there were six categories of advantages and six of the challenges. Thus, the data were grouped into what this study refers to as two categories with six sub-categories in each of the two broad categories. The two categories are:

1. beliefs that emphasize the advantages of OLEs for the teaching and learning of FSFL;
2. beliefs that emphasize the challenges related to the use of such environments for this purpose.

These categories were useful and effective in terms of finding a boundary for the data. The data did not need to undergo extensive interpretation or analysis in order to be classified in one or the other category. Within each of the two broad categories six, more specific sub-categories were identified as a result of coding the data. These categories are as follows:

Table 5.1 Belief sub-categories

Advantages	Challenges
Resources and information	Time and the curriculum
Communication and collaboration	Training, support and vision
Real-world learning	Access and equipment
Motivation	Control and monitoring
Learning	Students
Teaching	Online learning environments

The presentation or description of the findings in this chapter attempts to capture the essence of the beliefs which are often expressed in complex and conflicting ways. The use of a dichotomy of categories (advantages versus challenges) does not imply that participants expressed either one or the other set of beliefs. On the contrary. The same teacher oftentimes expressed both categories of beliefs simultaneously. For example, it was not uncommon for a teacher to express the belief that the use of OLEs allowed her to improve or advance her teaching practices while simultaneously arguing that she lacked the necessary time and training to achieve effective use of OLEs. The next chapter provides an interpretation of the beliefs and therefore an explanation for the conflicts and contradictions which arise in the beliefs described in the present chapter. This chapter does not attempt to interpret the beliefs instead it describes or presents them only. This description begins with the first category of beliefs which relates to the advantages to use of OLEs.

5.2 Beliefs Related to the Advantages to Use of OLEs

The beliefs that have been grouped into this category share a positive experience or perception of use of OLEs for the teaching and learning of FSFL. This section includes beliefs of teachers in which they express the value of the tools and technologies associated with online learning. The first sub-category groups those beliefs which emphasize the value of OLEs in providing access to resources and information which can be used to enhance teaching and learning. Global communication and collaboration constitutes the second sub-category and presents examples of how teachers believe OLEs can facilitate contacts and cooperation with Francophones around the world. The third sub-category - that of real-world learning, describes the value of OLEs in making learning more relevant and authentic. Motivating students constitutes the fourth sub-category. The final sub-categories emphasize the capacity of OLEs to enhance teaching and

learning.

5.2.1 Resources and Information

Beliefs on this subject described Internet information and resources related to the teaching of FSFL as being current, varied, appealing to a variety of senses and a range of interests, useful, immediate, cheap, authentic, universally accessible and often uniquely available online. One teacher described her reaction to the availability of online resources: "Because educational leaders are always talking about resource-based learning, we are delighted to find resources at our fingertips, literally". Not only are the resources described as being easily accessed, they are also described as being voluminous: "There is a wealth of information and resources available". One teacher described how the Internet "permits access to a multitude of information". The information and resources are described as being readily available, not only in English, but also in French: "If I find any more Francophone sites, I am afraid we will need to add another five - ten hours to the day. I believe we have a wealth of information available in French... more than we will ever be able to use". Whether the information comes from a Francophone site is not important to some teachers because, even when it is in another language, it can be translated online: "I believe there is plenty of material in French. Using the AltaVista translator you can even translate any site into French, Spanish, German and Italian." Another teacher described how the availability of resources has affected her practices: "... now there are many resources available to the students in French. Previously I had to find all the resources needed to complete a certain task. Many times the resources were not readily available since resource centres/libraries did not carry a wealth of French materials. I find the Internet to be a great tool, assistant, additional wealth of resources...."

Teachers described a wide variety of ways in which students can use OLEs to access information and resources such as: "to search out background information", "to do small research projects", to access "French literature, newspapers, sports, music", to access "up to date news articles" and "dictionary sites", to do "research of information on French-speaking cities, countries, communities", and to find "songs and lyrics of French music". As well, teachers can find "information to support the literature component" of their programs. The following teacher describes how OLEs provide her students with resources that would not have been available to them prior to use of the Internet:

I required the schools to which I taught to have a French language newspaper (Le Journal des Jeunes) in pre-Internet times. Now, there is a great selection of newspapers on the Internet and many other resources that I have located for Core French. Now, I can require students to do Internet searches for projects and class activities, I can prepare "Ralleys" that must be done on the Internet....My fear of students not having adequate resources with which to complete a project/assignment has now disappeared.

Access to information is useful in the French Language Arts' class, but, as well, in the teaching of content using the French language. In the following excerpt, a teacher recounts her experiences of using the Internet to find valuable online information in relation to the theme being studied:

I will be teaching immersion history after Xmas and I know that the internet will be invaluable especially in my ancient history course--I'll be taking the kids to the major museums of the world to see the antiquities displays, especially the mummies!! Just to complete the activity list: during the spring last year in my Ancient and Medieval History course, we decided to have a Med. feast. We researched the traditional feast on the net (and immediately decided that it was too elaborate to pull off during class) but found a wealth of recipes that my students took home and made and brought in. We invited the principals, brought in med. music and shared recipes after because some of the dishes were excellent!

Resources are not only abundant but also more "up to date" than the resources to which teachers would traditionally have access. As one teacher explained: "To have an effective Immersion program, one needs resources that are current. The internet provides this". It is in fact the nature of OLEs that makes the information appear so current: "The impermanent nature of the sites in itself - constantly updated - gives students the feeling that they are dealing with living data, as opposed to the sometimes stultified, and definitely sancro-sanct (sic) nature of data in books". Access to current, updated information provides added benefits for students and teachers:

I believe that the immediacy of the information adds another element to what the student is doing. When we use documents from current newspapers, journals, etc. the student is interacting with something that is contemporary. He/she reacts contemporaneously with what the native speakers are doing. This is appealing particularly if he/she can connect the piece to what is happening globally at the present moment. The study of French then becomes the study of current events, social studies, etc. and speaks to the need of cross-disciplinary teaching.

The wealth of information available online combined with its current nature may contrast sharply with the type and quantity of information traditionally available in libraries. In the following excerpt, the teacher predicts how, in the future, school libraries may be replaced by high-tech retrieval of online information:

I believe that retrieval of information will become so high tech within the next 10 years that I want to get a head start. We already have seen the reel-to-reel taping system become a thing of the past, making way for cassettes and CD's. I may be wrong, but I believe that school libraries will become obsolete in the same way, or will become a last choice if the internet is down! The wealth of info that is available with a mouse-click just can't compare to the outdated materials we have in our tiny library. I don't think students, given a choice of traveling to their public library or switching on their computer, will choose the former in years to come.

Teachers also expressed beliefs about the type of information available through the Internet. The information and resources for French on the Internet were described as varied and unlimited. As one teacher noted: "You can get information on just about any topic". Another teacher expressed the belief that the information available online was more diverse than what was available in "traditional resource centers" and another, that the Internet makes it easier for teachers to expose students to "a wider base of knowledge and resources". One teacher explained how use of OLEs offers students access to information not available elsewhere: "it also allows me to direct my students to other sources of information not readily available in other forms (books, magazines, etc.)." The following comments provide an example of the convenience afforded by use of online resources:

Avec Internet, le chercheur a sa portee et a moindre frais, acces a la plus grande majorite non seulement des medias, mais egalement de tout type d'informations . Par exemple, apres ecoute en classe de la chanson "LEA" du groupe "Louise Attaque" de nombreuses interrogations ont eu lieu: Combien de personnes? Jeunes? vieux? plutot punk? cheveux longs? gens normaux ? etc...Un simple clic sur le site internet grace au moteur de recherche Yahoo.fr que nous utilisons en permanence et voila nos apprenants informes par leur propre recherche.

Online resources are described, not only as being easily accessed, varied and affordable, but also as being able to meet the needs of a wide range of learners: "The Internet is an excellent source of different topics to fit the interests of each student." This capacity of OLEs to meet the needs of a range of learners may relate to the multimedia aspect as one teacher explains: "The internet's World Wide Web has become the premier place online for finding multimedia resources and connecting students to real-world events and people. Students have unlimited access to documents, photographs, maps, video clips, sound bytes, references and other learning materials". The value of the multimedia aspect of OLEs is attributed by one teacher to its capacity to generally enhance learning: "Use of still and animated graphics, sound and music clips can greatly enhance understanding and possibly promote greater retention of facts since it appeals to more senses. The students gain even more if they are the ones who create the material". The multimedia format of the Internet also presents certain advantages which may not be available in the regular text format: "I have used the Internet with one French class to research info on Francophone countries which they then used to create a travel brochure. This was much better than using an encyclopedia-easier to read, nice graphics, links to pertinent information".

Besides its appeal to a wide range of learners, online information has the added value of being "authentic". Online access to such resources is described as filling "one of the voids that existed in pre-Internet time". One teacher explains the importance of such resources to teaching: "The availability of authentic French resources is becoming more and more important. I believe in the importance of authenticity in teaching materials, especially for second language learning, in order for the language not to be so "foreign" afterall (sic)". The following excerpt illustrates how the Internet's authentic resources have made a difference to one teacher and her students:

Imagine the delight to find so much authenticity on the Internet. The topics are pertinent and very high interest for my students, levels 1-5. The 'match book' poster search, along with the resto menus are now downloaded so easily. I have always been in contact with MacDonald's in francophone countries, as well as with Burger King....and have had to politely beg for any of their publications. Le resto St. Hubert in Quebec has always obliged me with publicity handouts, menus, etc., and from that point I can initiate discussion which is meaningful to my classes, not to mention to the prof. I have always been a newspaper freak regarding Spanish and French newsprint, so the fact that I don't have to depend on my friends' generosity in snail-mailing me all those goodies is a relief. That being said, "La Presse" from Montreal is on my desk today --the cartoons, as well as local stories with a twist on the positive side of humanity.

The capacity of OLEs to provide access to resources is a valuable one particularly for schools in remote or isolated areas: "I neglected to mention in my last posting that the Internet has indeed helped in my teaching French to remote small schools. These schools do not have many French resources in their resource centres. They may have had a French-English dictionary, but that is it". Remote and isolated schools can also benefit from online access, not only to resources, but to other communities, schools and individuals. Beliefs about the advantages of OLEs for such contacts are described in the next section.

5.2.2 Communication and Collaboration

Teachers' beliefs about online communication indicate that OLEs offer significant advantages in terms of providing opportunities for meaningful communication from the classroom. Teachers in this study remarked that the Internet "provides avenues for real communication, be it in the form of key-pals, interactive projects, chat lines, net meeting". Students and teachers can make use of OLEs for "finding, sharing and exchanging information and ideas", for "authentic conversation", for "interaction and communication with students and teachers in French-speaking schools", for "correspondence by e-mail", for "contacting groups in other parts of the world" and for "journal correspondence with other schools".

The potential of online communication makes the Internet of special value to the teaching of foreign languages such as French. This potential for communication is described in the following excerpt as filling a void that existed up to now in second-language education programs:

I do believe that no one stands to gain more from les nouvelles technologies than foreign language classrooms. For years we have lamented the fact that our students have no concrete application of their language, and here we have, literally at our finger tips, a whole world of francophone kids, waiting for a chance to communicate with us. It is indeed, exciting.

Online communication also presents particular advantages to students living in isolated areas. As the experiences in the following excerpt illustrate, geographic isolation no longer presents a barrier to meaningful communication and conversation between Francophones and students of French as a second language:

The fact that I'm a primary French Immersion teacher in a somewhat isolated community on the south coast of Nova Scotia is further impetus for looking to give my students and myself better options in using the second language. Because of the school's location, it has been extremely difficult for our children to find meaningful opportunities to use their second language even though we are in a bilingual country. In essence, our students have had little opportunity to truly engage students from a French culture in honest conversations about who we are and who they are. While the Internet offered potential and promise in the early years, it has come to have real application in my teaching. My students are actually communicating/ interacting with other students. I now see it as a valuable and viable conduit to L2 success.

Resources and information can be found in a library or a book and as such in the regular classroom with or without access to the Internet. However, communication cannot: "E-mail and chat rooms provide an environment that cannot be duplicated in the classroom". Online communication provides a means of "meeting francophones", carrying on "authentic conversation" and participating in the reality of communication as it exists outside of the classroom-something which cannot be found in a book:

The realia is none other than real-life kids on the other end! For my young French immersion students, the written information available on the Internet is secondary. A good book or CD-ROM is usually far superior to anything they'd find on the 'Net. But the opportunity to communicate with kids their own age in real - or almost real - time is something we've been dreaming of for years.

This capacity of OLEs to provide a communication tool is of particular value to young children. In the following excerpt, a teacher argues that this capacity is what represents the important value of the Internet for learning:

With young children, the Internet is best used as a communication tool. There is little information available on the 'Net for elementary kids that a good book or CD-ROM couldn't do better. But for immersion kids to be able to communicate with francophone kids the world over - that's something entirely different.

A particular online communication tool described by participants in this study is that of chat rooms. Teachers described such 'rooms' as a popular means of facilitating communication while at the same time simulating real-life communication situations and environments. This feature of OLEs allows students to converse in French with classmates and presents particular advantages for certain types of students:

My newest adventure is into the chatrooms. We have a site on the Imaginet Page that has an empty room and we all sign into it, take on identities and chat with each other in French! I circulate around the room and give advice on grammar errors or expressions that I see on the screens without everyone else knowing who I'm talking to! Also, we debate certain topics and the anonymity lets the shyer kids who might not participate in an oral discussion express their comments.

The capacity of OLEs to facilitate communication is an important one. One of its greatest advantages is that it encourages participation from shier children. Chat rooms also offer teachers the opportunity to focus on grammar using a different approach:

... my kids sign into that chat room and take on 'handles' and chat with each other. I circulate around the room and correct/fine tune the grammar or suggest little phrases that might add some spice or be more comical...they love it! Sometimes the conversation degenerates and we're obliged to exit but usually, they respect the rules and we have a civilized chat! Sometimes I let them free chat, sometimes I assign a topic and we debate it. It allows the shy students to express their opinions whereas in the oral setting, they might never dare to. It also allows me to clarify grammar as all my kids are looking at the screens and they all see what I am asking be corrected at the same time. Better than using an overhead! It's not perfect but it gets everyone participating and hopefully learning something.

OLEs need not be used only to offer opportunities for conversation within a classroom, but as well as outside of the classroom with native speakers. Such conversation provides students with opportunities to be exposed to other language models. The Internet "can provide interactive communication with native speakers. The teacher should not be the only model". Opportunities for communication can also be coupled with global, virtual visits to other countries or places where French is spoken. The following teacher describes her experience with such visits: "The Internet has been a great boon for me as a professor of French. It can work to the benefit of students in that they can now "visit" French-speaking countries and it's really not that expensive - if your school has the appropriate access". Students can participate in "virtual tours which allow the students to see parts of the francophone world". Online communication has represented a great advantage for this immersion teacher: "Of great value has been the communication that we have been able to carry on with other francophone classes and individuals. This provides a much needed personal exposure to the French language for my immersion students".

The exposure to the French language provides opportunities for communication as well as collaboration. Collaboration represents an important means of linking students to the realities of learners in other classrooms around the world so that they can share ideas and learn together online: "The Web makes possible new levels of individualization and encourages collaborations that take students far beyond the classroom; individual e-mail accounts enable students to initiate contact with other learners and resource people, take part in collaborative projects, and communicate with family and friends." Students can work on projects, carry on conversation and collaborate in OLEs with many added benefits: "Students have the opportunity to work on collaborative projects with other schools, other countries, resulting in a sense of international solidarity." Racial tolerance as well as international solidarity may be achieved through online communication:

I also believe in the world being a global community. My students correspond with people in other countries by e-mail, chat, icq whatever way they can! They are ravenous for contact with the outside world, and want to learn about and share themselves with as many people as will listen. That is why I am pushing e-palling. The more that our next

generation learns about people in other countries and comes to accept other cultures while sharing their own, I believe we become one step closer to fulfilling the concept of a "global community" and one step closer to promoting tolerance for all races and cultures.

Online communication and collaboration can result in truly meaningful connections and communication particularly when friendships are formed between classes in different countries:

There's one particular school in France that I've been corresponding with since 1995. We've collaborated on many themes from Christmas rituals to preferred seasonal activities and have sent each other "care" packages with odds and ends (put together by the students) about our communities. We've also done and exchanged a video presenting our particular school. This has become a very special relationship, as you can appreciate. The Internet has certainly helped it to flourish.

Global communication and collaboration provide students with opportunities that might not otherwise exist in their classrooms. These opportunities provide for greater contact with the world outside of the classroom - the 'real world'. Beliefs related to 'real-world' learning are described in the next section.

5.2.3 Real-World Learning

For students living in areas far from Francophone cultures, the study of French might not be easily associated with its real-world context. Certainly a challenge for the teacher of FSFL is to help students link with this world, its language, culture and people. However, when the only exposure to the language and its people is through books, it may be challenging for students to appreciate the study of French as being any more than the study of a subject with little relevance to the real world. However, as one French teacher remarked, in OLEs "students can see for themselves that French is not just about what we do in school, books-grammar etc.. It is indeed a living language." The Internet can allow "students to see French as something real -not just a subject taught in school". Online learning experiences can thus help students "to see French as something existing other than in the classroom" and "to realize that French is not 'a dead language' when they surf the net and find millions of sites in French, in both Canada and around the world." One teacher described the positive impact of real contacts made with another class through OLEs:

I teach in a small community in Montana. Many of my students will never travel outside the United States, let alone the western US. Last year when a teacher from Québec contacted me to set up a letter exchange, I saw how real the French became for my students. Things I had been trying to tell for several months became very clear because they discovered for themselves the answers my students are exposed to more French than I could ever provide in our classroom.

The use of the Internet can serve as a support to the teacher in her attempts to ensure that students appreciate the real-life applications of the French language: "I feel that it has made my teaching more 'real' for lack of a better term. My students feel more in touch with the francophone world

when they see what I'm talking about on a screen in front of them. I believe they come to understand the value of French in a whole different way." In general, learning French in OLEs can have a positive effect on the learning environment even while students are not online in the sense that there is a certain carry-over of the positive effects to the classroom learning situation:

Any learning must take place in relevant, real, challenging and connecting contexts. Internet allows teachers and students to make this happen. Learning a second language becomes far less contrived and simulated. It is hoped that the experience then brings forth enough positive energy to create oral interaction in the classroom. It creates oral interaction when preparing and anticipating before an activity, it creates interaction when researching, questioning, discovering during the activity and it creates interaction when reviewing, giving feedback, discussing their learning after the activity.

Another important aspect of making the study of French more 'real' is in providing students with an audience for their work. Having an audience can affect the type of work that students produce: "They also tend to be more careful over what they say and how they say it because of the wider and varied audience; they have a real audience and a real purpose." OLEs provide students with opportunities to produce original work and then share it online with others outside of the classroom:

Building a web site to share student-generated work is another important use of the Internet. Again, its use as a productive (rather than receptive) tool is what gives it its value. We finally have an audience for our kids stories and poems, and it's an authentic one. That's what the Internet means in an immersion school.

According to the following teacher's comments, use of OLEs requires abandoning traditional models which were more suitable to book modes of learning:

...we have to think Internet as opposed to book learning when we use the Internet. The linear model of learn, answer questions, test, is based on what is manageable for the book and paper form of learning. Actual real-life learning on the job takes place much more diversely and has an actual real application. Therefore why not get students to do more projects based on their real questions about the world, find info. talk to real experts online and find their own answers.

The opportunities to talk to "real experts" and to ask "real questions" can be made easier in an environment where the information in general appears more real. Such opportunities can also result in more effective learning as the following teacher's comments illustrate: "The internet is also a place where shock value has it's (sic) place. Nothing brings home the Holocaust better than a virtual visit to Auschwitz or to a Holocaust museum, or to a skinhead's hate page. It is really in-your-face learning and it hits home more effectively than looking at a distant TV screen up in the front of the class".

The beliefs expressed on the topic of 'real-world' learning through use of OLEs suggest that such learning is, in some ways, more effective than regular classroom learning. One of the reasons for this increase in effectiveness may have to do with the relationship between making learning more

relevant for students and student motivation. In the following section, teachers describe how OLEs increase student motivation and generally result in a more effective learning environment.

5.2.4 Motivation

Participants in this study expressed the belief that OLEs had an influence on the motivation of students learning French. Teachers noted that students are "more interested in doing research this way than from books", that they "get very actively involved and interested", that they tend "to be more positive about French", and "find it fun and interactive". The Internet "makes the student more interested" and "increases motivation." In general, as one teacher noted about students: "I find that they are more interested in French class and learn more when i (sic) assign Internet activities". Another teacher concluded similarly and remarked that students "seem to respond a little more enthusiastically when you say the information came from the net". The experiences of one teacher led her to conclude that, not only are her students motivated by working online, but that they have an opportunity to learn how much French they understand while doing research online: "My students seemed to be motivated in a big way by the Internet technologies. They seemed to want to know how to use all these technologies, not only in French classes but across the curriculum. However, they have been very interested in doing research in French and very surprised at how much they understood in the second language."

The following teacher explained just how positively her students responded to online learning experiences: "I have a much more enjoyable time with these youngsters because they are so positive in their response to my class. They are eager to learn and are willing to try any type of new activity. Even if the activity is a "disaster" they are supportive". Students will exert a special effort in order to learn how to use the technologies and may show more interest in doing research in French when they do it online. The extra effort can be particularly motivating for those who may normally encounter difficulties with learning:

...students always display an interest in using computer technology regardless of the purpose. I have witnessed students putting more effort into assigned tasks simply because they are using a computer. They are always enthusiastic participants and most of my students are quite proficient with computer use which provides them with feelings of success when they are able to successfully complete assigned tasks. This is especially important to student (sic) who usually struggle with their regular class work. They often seek out extra assignments when they are finished.

Students' high levels of motivation can result from having instant feedback, being able to visit exotic destinations and doing interactive exercises. In the following excerpt, one teacher describes how she incorporates these sorts of online activities into her teaching and how, as a result, her students are motivated to use more French than normal:

I love using the internet for my French classes and my kids do too! I have taken them into the University of Texas first year French files and they have participated in interactive grammar exercises where they type in answers and at the end of 10 questions, they get an instant correction page. They love having the instant feedback and it is more interesting

than a worksheet. I have also done guided travel tours, that I must research myself first, and the kids visit all kinds of exotic destinations-searching for the answers to questions on the guide sheet. We have explored comic strips, written letters to Santa, listened to French Radio-looked up the kids' favorite music groups -- Spice Girls, Blur, Hansen etc, the possibilities are endless!! My grade 12 immersion did "Le Petit Prince" this semester and to break up the monotony, we came to the internet lab to read the book on-line. The kids also were able to read reviews of the book. They thought that was kind of neat, even though they still didn't want to read the novel!! I love this medium. It keeps their attention and they are reading and conversing 100% in French, something they wouldn't do in the classroom.

Students' motivation may well derive from the fact that they have an audience for their work, thus making them more responsive and generally more interested:

In general, this tool is a great motivator for the students, and I see this as probably its greatest benefit, at least given the amount and the types of uses to which we are limited. The students want to discover the answers to the questions posed or follow up on activities they have been engaged in because it involves someone in another community or country even. It lends a certain amount of exotic flavour.

The "exotic flavour" may help motivate students who would otherwise not be motivated to learn French. Lack of motivation may be observed amongst second-language learners particularly when there may be competition to learn other second or foreign languages such as English. For students living in areas geographically removed from Francophone areas, and where other languages may have a greater influence than French, OLEs can play an important role in motivating students to learn French:

J'avoue que nos étudiants ne sont pas très motivés pour apprendre le français. D'abord parce que l'anglais s'impose de plus en plus, deuxièmement parce que la deuxième langue qu'on étudie maintenant est le portugais (du Brésil) à cause du Mercosur (marché commun de l'Amérique Latine qui a comme principaux partenaires le Brésil et l'Argentine). Le français n'est plus pour nos étudiants ce qu'a (sic) été pour leurs parents ou grand-parents. Il y a beaucoup d'influence française en Argentine, surtout à Buenos Aires. Les générations du début du siècle jusqu'aux années 50 se formaient en France, ou en Europe en général. C'est à cause de cette démotivation pour l'apprentissage du français que j'ai commencé à travailler sur le projet d'introduire le français par ordinateur.

Lack of motivation may be more common, not only as a result of geographic isolation, but also as a result of the student's age. Allowing students to learn in OLEs may counteract the lack of motivation particularly when they can have fun doing so:

I have two reasons why I wish to use the internet in my second language classes. First of all, it allows students to experience another place where French exists. As well, students at the intermediate level are not particularly motivated to do much work in their other classes, let alone French which "sucks" as they so eloquently put it. They need motivation

and I feel if they can have fun while still encountering the target language either through comprehension or production activities, then they are more likely to put an honest effort into the activities I choose for them.

Motivating students may also be accomplished by focusing more specifically on students' particular needs and by generally improving or enhancing the learning process. The beliefs described in the next section highlight ways in which use of OLEs can allow teachers to concentrate more specifically on the needs of their students and improve the learning process in general.

5.2.5 Learning

Many teachers in this study expressed the belief that OLEs represent an effective means of meeting the changing needs of today's students: "The nature of student learning has changed dramatically in the past decade as teachers have a more difficult task of motivating their students. The students are accustomed to numerous stimuli, (ie. (sic) virtual video games, etc.), thus the teacher has to be more creative to obtain and maintain their attention". In the following excerpt, a teacher describes how she maintains students' attention and meets their changing needs through use of technology:

Today's students are quite different from those of even 2-3 years ago. I am motivated by the desire to make my classes as interesting and relevant to my students as possible. Let's face the fact that today's students grow up in a world that is super hi-tech. These youngsters are raised in a world in which they are "turned on" to a very audio-visual environment from infancy. As a teacher I must deal with this situation on a daily basis. So, my decision is to make the class as stimulating/interesting/relevant as possible through the manner in which I introduce/reinforce information. I have made a decision to implement all types of technology in the classroom. Within the past two years I have added e-mail exchanges with students in other countries; the use of CD-ROMs; internet sites, etc. into my curriculum.

The way in which students are changing can affect the way in which they do research and the tools with which they do this research. One teacher described her students as being more comfortable with an "arborensence" (sic) approach of the Internet rather than a "linear and traditional approach" common to text-book learning. This teacher's comments focus on students' growing dependence on the use of electronic tools such as the computer and provide a prediction about how their needs will continue to change over the course of the next decade and beyond:

I also believe that students are becoming lazier...just as they must use their calculators as a crutch because most of them are unable to do simple math calculations in their heads, so will they begin to depend on the instantaneous reply of the computer to respond to their research needs. Most will probably not know the inside of a library and how books are classified or ever consult a card catalogue within 15 years!

Not only does use of OLEs allow teachers to better meet the needs of students, but it can enhance learning in other ways as well. Teachers described how the Internet "broadens the students' horizons" and allows "students to be creative and learn through experience", to have "more independent learning in class" and "to learn on their own while using an alternate approach to teaching." One teacher commented that the Internet is a "nice change of pace from the regular classroom setting". Teachers commented on the range of activities in which students can engage online such as "internet competitions", "interactive activities, treasure hunts, crosswords", activities for special occasions, i.e., Christmas, Valentine's day, holidays, festivals". They can also access "games, puzzles, maps", or have fun "sending greeting cards".

The multimedia capacity of OLEs can have a positive effect on the learning experience: "Use of still and animated graphics, sound and music clips can greatly enhance understanding and possibly promote greater retention of facts since it appeals to more senses." OLEs may also appeal, not only to more senses, but, as well, to different types of learners: "Differences in learning styles and individual abilities and strengths can be addressed through the variety of skills and types of activities involved with projects which take advantage of the computer and the Internet in particular".

OLEs can have an overall positive effect on the learning situation by allowing students to reconceptualize their role and the role of the teacher: "Used in the context of group work and resource based learning, it can help create a situation in the classroom whereby the students become more responsible for their learning. They realize that the teacher does not have to be a font of information, rather a guide. Hopefully, this will encourage them to become lifelong learners." One teacher provided support for this change in the role of the student: "Students become more responsible for their own learning and research and this is a good thing. It makes them become more responsible and independent learners." In general, use of OLEs can make students less dependent on the teacher to provide them with the necessary information and tools that they need: "My students are becoming less dependent on me to find information. They often find their own sites". OLEs can allow students more autonomy in learning, by providing them with the tools and information necessary to construct their own knowledge:

Les équipements actuels rendent surtout plus facile le travail en autonomie. Parce que l'apprenant possède, virtuellement, toutes les sources d'informations dont il a besoin, il lui est possible de construire seul son savoir. Parce que le matériel de formation en autodidaxie est plus accessible et plus facile à manipuler, la formation devient plus facile (mais cela ne signifie pas que "l'autonomisation langagière" de l'apprenant - ses capacités à se débrouiller seul en langue/culture - soit rendue plus aisée).

Along with a change in the role of the student may come a change in the level of thinking that they do while learning. One belief about OLEs suggests that learning online draws on higher levels of thinking skills than might be found in traditional learning environments: "When students use the Internet in their second language learning certainly they have to problem solve: analyze, interpret, synthesize the materials that they are using on the Internet". In the following excerpt, one teacher explains how a simple Internet activity can require students to engage in critical thinking and problem-solving:

If, for example, in planning a trip to Quebec City, the students had to use the Internet to develop an itinerary for their trip, they would have to be within a certain budget. So, they would do a guided search under the supervision of the teacher (provide some sites for the students), they would have to make comparisons, decisions, and report back to the class with the planned itinerary. They must also be ready to explain why they chose a certain activity and not another. This, to me, would be an example of students using critical thinking and problem solving in an Internet activity in the French classroom.

Changing students' role and bringing them to higher levels of thinking are some ways in which OLEs are described as affecting students' learning in general. However, OLEs were also described by participants in this study as specifically affecting students' language skills. In general, use of OLEs with students is described as something which "enriches their language experience". In particular, "opportunities to develop written communication skills are abundant". In terms of the types of writing activities in which students can engage, participants in this study noted that students can create "class web pages where students can post autobiographies and display their art work", that they can engage in "creative writing with online feedback" and that they can engage in "writing for publication".

As well, according to some teachers, online learning can make up for the lack of interaction in the regular classroom by providing opportunities for the development of listening skills and by helping students to see a purpose for language learning:

I also use web sites for listening activities - there are many radio stations online with reports that can be downloaded, music clips, etc. It does take planning and lots of time to incorporate such activities into the curriculum, but I think the time is well spent as the students enjoy the lesson so much and begin to see a purpose to learning a language and even to learning grammar! This year I will be using a discussion board and chat rooms with guest "speakers" from various French-speaking countries in all level of classes that I teach. Granted, it's not oral communication, but this is more of a cultural exercise. As the students go through the lessons I want to incorporate several "side tripss" (sic) to websites to make France and French more of a reality to them. What they lack in classroom interaction could, in part, be helped through use of the Internet.

Opportunities for online communication provide for enhanced learning experiences. Furthermore, enhanced interest levels in students as a result of working online can possibly encourage students to use more French than in the regular classroom:

I figure the more time they can work in groups and chat amongst themselves in the target language the better, and using the internet provides the dual opportunity of leaving the classroom setting, and presenting an activity that is relevant and interesting so that they are too involved in the task to begin speaking English.

Online learning also provides an opportunity to develop an appreciation for the cultural aspects of French. The Internet "opens up the classroom to many more cultural inputs than the library did, especially because of direct contact with francophones, be it through listservs such as

CAUSERIE, or WWW sites which can linger on cultural details books simply cannot afford to do economically...". As well, the exposure to these cultural aspects may be more enriching than what students typically encounter in the classroom: "At last, we have a chance of truly integrating that cultural piece that seems always to elude us. At last, we can get past the beret and baguette!"

According to some teachers, OLEs appear to provide students with an opportunity for a learning experience which the teacher cannot provide: "The internet is enhancing their learning..is filling in blanks that I, as a stand-up teacher, can't possibly hope to fill and it is keeping them on task for the whole period..something that rarely occurs in a regular classroom setting (for me, anyway!)". Increased use of OLEs in the classroom can have an effect not only on the students but, as well, on teachers. The following section groups those beliefs that centre on how technology is changing and improving teachers' role and their teaching practices in general.

5.2.6 Teaching

One of the important advantages described by teachers in the use of OLEs is the wide range of activities available for students and teachers. Teachers described a large variety of ways in which OLEs can be used in second-language teaching such as for the "creation of tailor-made multimedia learning activities", for "enrichment", for reinforcement of "grammatical points and structures learned in class", to access "dictées, short stories, proverbs", for the "development of themes" and "vocabulary development, "to access games and enjoyable activities for students", to "search for ideas/lesson plans or articles to share with students", to "improve the cultural content of program", for "reinforcement of previously learned concepts", and "incorporation of sites to be used in learning centres", to "provide opportunities to go beyond expected curricular outcomes", for "skills development", to "access to teaching strategies" and to promote "hands-on learning". Teachers may also find OLEs useful "to access upgrades for software and information on various topics, mostly software or classroom related".

Many teachers in this study expressed the belief that OLEs were influencing their teaching practices and their role in a positive way. Participants gave different reasons why they appreciated using OLEs. One important use discussed was that they can use it to "share ideas and to take part in on-line discussion lists dealing with second language pedagogy". One teacher commented that the Internet provided her with "a much broader perspective on education" and another that it provided "access to the latest trends, ideas and philosophies, good and bad, on education from around the globe". Teachers commented that researching on the Internet gives them teaching ideas as well as a variety of ways to approach more familiar concepts: "The 'Net' is a source of knowledge, ideas, inspiration, solutions to problems.... You don't always find what you are looking for, but often you come upon something of real value that you might never have discovered otherwise". The Internet was also described as providing "another teaching technique", and "a means for alternate teaching methods" to which students are exposed. In the following excerpt, a teacher describes the positive effect that the use of OLEs has had on her teaching and has made her a better teacher:

I get to vary my teaching style, it pushes me to keep changing--it is so easy to get into a comfortable rut! I get to offer the students worlds by visual aid of the computer that I could have never dreamed of by "normal" teaching methods. I guess it is making me a better teacher and I am more proud of the product I am delivering--it is now multi-dimensional rather than dry and boring.

Some participants focused on how use of OLEs assisted them in the delivery of the curriculum by serving as "a great resource to supplement the current curriculum material" by providing "support for the cultural objectives of the Core French Program" and by supplying "valuable supplementary information" for use in "developing the themes contained in the Junior High French curriculum". One teacher noted enthusiastically that "There are more and more valuable French resources appearing online, which is a boon to those of us in "cultural isolation" in terms of French Immersion programs". Furthermore, the Internet offers opportunities "to converse with other teachers to discuss and share ideas" and generally "promotes contact among teachers" which makes it "excellent for sharing units of work etc.". Such contacts also can provide teachers with opportunities to keep up with their French as the following excerpt explains: "Personally, I have found it a very valuable means of keeping up with my French. I subscribe to several French listservs and have made some close (continuing) contacts over the years." Maintaining one's French is made easier through use of OLEs particularly through use of chat features: "I correspond by e-mail with French friends but it is when we move to the chat rooms and converse in "real time" that my language maintenance and learning takes place...all those everyday expressions that you don't tend to include in letters..and the gestures and yes, the sighs and frustrations!". In general, for a French teacher living in non-Francophone area, maintaining one's French is a difficult task made easier through use of the Internet:

As a non-francophone, French immersion teacher, I have to say that one of the greatest benefits that I derive from Internet access is the ability to keep up with my French. At least 75% of my e-mail correspondence is carried on in French, for the most part with francophones. In some cases this has also resulted in the development of valuable and lasting friendships.

Use of OLEs can also make teaching and learning more interesting and motivating for the teacher by providing opportunities to go beyond the prescribed curriculum:

Yes, the minister wants a particular curriculum covered and yes, it is very tempting to just stick to the provided texts but how boring to use ONLY the prescribed materials and not have enough interest or motivation to spice up our own teaching and the students' learning by experimenting with new methods of instruction..videos, cooperative learning, internet etc! Many of the old school teachers will stick religiously to the text book and they believe they are on the cutting edge and providing enrichment by showing a pertinent video in class--to me, that kind of stand-up delivery classroom is like using a film-strip or a reel to reel tape. It has merit, and information will certainly be transmitted to the students, but how much more could be done in that room in the allotted time by using the advances and tools that are now available to most of us in our schools.

OLEs can also provide teachers with the opportunity to develop courses which are richer, better structured and which allow for more independent learning on the part of students: "Parce que l'enseignant a maintenant à sa disposition toutes les sources d'information qui lui faisaient naguère défaut, il est maintenant capable de construire des cours plus riches et mieux structurés (à condition qu'il accepte d'y consacrer du temps), et des cours permettant mieux le travail en autonomie".

OLEs' support to teachers by allowing them easy access to "up-to-date information" may explain why some teachers described the Internet as supporting a resource-based and communicative approach to language teaching. They explained that they tend to teach more "from a resource-based perspective" and to give more research projects knowing that they can avail of the Internet. The Internet's capacity to support a resource-based or project-based type of learning can also provide support for a change in the role of the teacher and the relationship between teacher and learner:

Because of a number of factors, I have found myself moving more towards a cross-curricular, resource-based, project-centered approach with my students. To borrow a phrase, I am trying to become more the "guide on the side" as opposed to the "sage on the Stage". I have found that the Internet offers resources and access that help foster the types of activities/opportunities that I want to create. This type of approach, though, can be very demanding. It requires a great deal of time and lots of organization and background work. For the past few years, I have tried to develop and introduce one, new Internet based project and add it to those that I have already developed. In addition, there are many worthwhile activities sponsored by other classes that I incorporate (sic) into our classwork - again, offering the same approach of making the students more responsible for and in control of their own learning.

Some participants in this study discussed how OLEs provide support for and even forced teachers to adopt the role of "facilitator" as opposed to "a disseminator of knowledge": "One of the ways in which using the Internet changes one's way of teaching is that if you had not adopted the role of facilitator, technology will force you to take on this role." Another teacher provided support for this change in role: "The teacher does not have to be at the center of instruction. When one can get past this, then integrating the Internet becomes fun and exciting". Instead of being the specialist, the teacher can be researcher who sets up the learning experiences for students:

The Internet permits the teacher to adopt the role of facilitator (so often espoused in professional development but difficult for many to achieve in the classroom) rather than all-knowing sage. It also allows the generalist teacher to link from an area of strength, i.e., information researcher rather than French specialist, to effect learning opportunities for students. Many of the generalists with whom I work have fine reading skills in French but are hampered by poor oral skills/confidence; the medium of internet increases their ability to participate and lead effectively.

For some teachers, use of technology can move teachers towards a more facilitative approach. As one teacher explained: "I used to apply the direct approach with repetitive drill, teacher led

lessons. My style now is more constructivist, facilitative, multi-disciplinary in nature and I tend to approach themes with the given, that the computer is an integral part of activities, center work, etc." Changing the teacher's role can help breath a new life into the profession providing that the teacher is willing to reconceptualize his/her role. The new role requires a shift in the locus of control between teacher and student:

...the Internet has changed my practice of teaching, by allowing the student more control and therefore encouraging more active learning in the class. As long as a teacher is willing to give up the 'sage on the stage' concept, and become a 'guide on the side',--the technology becomes an asset and not a liability. We needed a breath of new life, teaching had become stagnant, and now we are on the right track, in my humble opinion. I look forward to surfing the net, to make the language current and pertinent.

The change in roles means giving more control to students and allowing them to explore. One teacher offered encouragement to other teachers about the new role but also stressed the importance of being willing to change:

Teachers have to be open-minded and not worry about losing 'the spot of authority' that they have traditionally held in front of the class. If they are not fearful of empowering the students to explore, than that will enable the teachers to expand their horizons. The willingness to watch other teachers in action, and to see what their approach is also critical to proper use of the Internet.

5.2.7 Summary

The beliefs expressed in this section provide evidence of the enthusiasm felt by teachers as they experiment with new online technologies. In the following tables, the beliefs related to the advantages of use of OLEs are summarized.

Table 5.2 Summary of beliefs related to the advantages to use of OLEs

Resources information	Communication collaboration	Real-world learning	Motivation	Learning	Teaching
Resources easily available at fingertips	Provides avenues for real, authentic communication	Students see French as a living language	Students are actively involved and interested	Students prefer the arborescence approach of OLEs	Promotes contact among teachers
Wealth of information available, voluminous abundant	Provides meaningful opportunities to use their second language	Makes clearer things that are being taught in the regular classroom	Students are more interested in doing research using this format	Students grow up in a high-tech world and OLEs appeal to them	Provides teachers with a broader perspective on education

English sites can be translated using online tools	Reduces geographic isolation	Students are exposed to more French	Students find it fun and interactive	Broadens students' horizons	Supplements current curriculum
Provides unlimited access to materials in a wide variety of formats	Means of meeting Francophones interacting with native speakers	Provides students with an authentic audience for their work	Students are more eager to learn online respond more enthusiastically	Abundant opportunities to develop written skills	Provides access to information, software upgrades
Able to meet needs interests of a wide range of learners	Students can work on collaborative projects	Students can consult real experts	Counteracts lack of motivation for learning of French	Enriches students' language experience	Promotes hands-on active learning
Adequate resources now available for research	Allows for a concrete application of the language	Students come to understand the value of French	Students learn more with Internet activities	Allows students to learn through experience	Helps maintain teacher's French
Resources useful for teaching of content in French	Presents communication advantages to shier children	Learning becomes less contrived and simulated	Students are supportive of all types of online activities	Allows for more independent learning	Sites can be incorporated into learning centres
Information resources are current, constantly updated more alive than what is in books	Provides communication tools that cannot be duplicated in the classroom	Creates positive energy to promote oral interaction in the classroom	Students' computer proficiency provides them with feelings of success	Use of multimedia enhances understanding promotes greater retention of facts	Provides opportunity to vary teaching methods thus making teaching more interesting
Information is immediate	Provides alternate language models	Students feel more in touch with Francophone world	Maintains students' attention	Students become more responsible for their learning	Useful for dictées, short stories, proverbs
Varied diverse information available on all topics	Students can make virtual visits inexpensively	Provides students with a real purpose for learning French	Encourages greater use of French	Promotes problem solving and critical thinking	Useful for skill vocabulary development

Available to students regardless of geographic location	Increases interaction among students	Makes teaching more real	Students put more effort into online work	Allows students to be creative	Allows students more control
Large number of Francophone sites available in French	Promotes international solidarity	Results in more effective, in-your-face learning	Makes French appeal more to intermediate-level students	Students are becoming lazier are dependent on electronic tools	Teachers can participate in online discussions
Multimedia format appeals to a variety of senses thus enhancing learning	Provides opportunities to see parts of the Francophone world	Provides learning in relevant, real, challenging connecting contexts	Students' positive attitude makes teaching more enjoyable	Can be used to access activities for Christmas, Valentine's day, holidays, festivals etc.	Source of knowledge, ideas, inspiration, solutions to problems
Information easier to read than an encyclopedia	Promotes racial and cultural tolerance	Useful as a productive rather than receptive tool	Students display an interest regardless of purpose of activity	Provides opportunities for the development of oral skills	Allows teacher to adopt role of facilitator
Provides more diverse information wider base of info than what is available in a library	Can be used for finding, sharing and exchanging information and ideas	Students realize French is not a dead language	Students often seek out extra assignments when finished their work	Allows for effective integration of culture provides for enriched exposure to culture	Supports a cross-curricular, resource-based, project-centred approach
Authenticity of resources helps makes language less "foreign"	Allows establishment of new relationships friendships	Students see French not just as subject taught in school	Students want to know how to use all the technologies	Encourages students to use more French	Allows teachers to share ideas units of work with others
Provides information not available in other forms	Allows for creation of global communities	Students tend to be more careful of what they say online because of audience	Allows students to experience another place where French exists	Differences in learning styles abilities can be addressed	Teachers can create courses which are richer better structured

Inexpensive source of information	Makes possible new levels of individualization	Sharing student-generated work is an important use of Internet	Students are motivated by the instant feedback	Students can construct knowledge on their own	Allows a more constructivist, facilitative, multi-disciplinary style of teaching
Useful for searching out background information	Allows for communication with family friends	We must think Internet not book learning when we use Internet	Students are more positive about French	Allows student to learn on own while using alternate approach to teaching	Can be used to create tailor- made multimedia learning activities
Useful for accessing French literature, newspapers, sports, music dictionary sites	Can be used for correspondence by e-mail	Linear model of learn, answer questions, test is based on book learning	Students are reading conversing 100% in French which they would not do in the classroom	Students can engage in Internet competitions	Allows for reinforcement of grammatical points structures
Fear of students not having adequate resources has now disappeared	Can be used for journal correspondence with other schools	Projects can be based on real questions about world students can find their own answers	Feelings of success online are important to students who usually struggle with regular class work	Students can access games, puzzles, maps	Useful for enrichment to go beyond expected curricular outcomes
Students gain even more if they create the online material	Communication provides personal exposure to French language	Learning on Internet is more effective than T.V. screen in class	Interactive grammar exercises are more interesting than a worksheet	Students realize teacher does not have to be font of knowledge	Source of latest ideas, methods approaches techniques
Provides information to support the literature component of program	Represents a valuable viable conduit to L2 success	—	Internet increases motivation	Students can use OLEs for sending greeting cards	Provides access to games enjoyable activities for students

Can be used to find songs and lyrics of French music	Teacher should not be only linguistic model	–	–	Provides interactive activities, treasure hunts, crosswords	Technology forces teacher to be a facilitator
Useful for doing research on French-speaking cities, countries, communities	Online chat allows opportunity to clarify grammar	–	–	Keeps students on task	Provides support for cultural objectives of program
Impermanent nature of sites gives students feeling they are dealing with living data	Internet is best used as a communication tool	–	–	Today's students are different from those of 2-3 years ago and are raised in audio-visual environments	If teacher is willing to be guide on side, technology becomes an asset
Helps in teaching to remote small schools	Students are ravenous for contact with outside world	–	–	Reports music clips can be downloaded for listening activities	Can be used in the development of themes
Speaks to the need of cross-disciplinary teaching	Encourages collaborations that take students far beyond classroom	–	–	Opens up classroom to more cultural inputs than library	Willingness to watch other teacher's approach critical to proper use of Internet
Provides access to most media	–	–	–	Presents activities that are relevant and interesting so students are too involved to use English	Boring to use only prescribed materials not spice up teaching with new methods

Students interact with information that is contemporary	–	–	–	Provides a change of pace from the regular classroom	Allows teacher to vary teaching style and pushes teacher to keep changing
Access to info fills a void that existed in pre-internet times	–	–	–	Provides students with other language models	Can be used to search for ideas, lesson plans or articles

In many cases, coupled with the enthusiasm about the advantages of OLEs are the frustrations experienced by some teachers as a result of their attempts to make use of OLEs. The next sections of this chapter concentrate on a different category of beliefs than what was presented in this section. Learning and teaching may be enhanced through use of OLEs. Yet for some teachers, the frustrations experienced or perceived have led the teachers to form beliefs that raise important issues and questions about the use of OLEs in language learning.

5.3 Beliefs Related to the Challenges to Use of OLEs

In contrast to the previous section which concentrated on the value of OLEs for the teaching and learning of FSFL, this section highlights those beliefs which generally question its value or which raise concerns about use of OLEs. Issues related to time and the curriculum constitute the first sub-category in this section. The lack of training, support and vision constitute the second sub-category. The third sub-category focuses on issues related to connectivity, online access, access to computer labs and supply of equipment. The fourth sub-category concentrates on beliefs which present the challenges related to monitoring students while online and controlling what they do and access while online. Students themselves are the focus of the next sub-category as teachers describe their beliefs about how, sometimes, students may resist their attempts at trying to teach and promote learning in OLEs. In the final sub-category are beliefs which emphasize the particular challenges related to the Internet, and such issues as navigation and information overload.

5.3.1 Time and the Curriculum

In this sub-category, two main issues provide the focus of beliefs: time and the curriculum. Some of the beliefs in this section could have been grouped separately, i.e. some in a sub-category of time and others in a sub-category related to the curriculum. However, while teachers might believe that the Internet is "good resource" for the curriculum, they may also see it as a "great time-waster". The importance of time management in teaching was expressed by this teacher's

comments in relation to use of the Internet: "Time is of the essence when teaching therefore one is apt to give up before achieving success." Many teachers in this study referred to lack of available time to be able to prepare for use of the Internet in their teaching: "All of potential (sic) for internet is unlimited but like many others there is no time to get on it. I do not have preparation time of any kind and I have to leave some time for a personal life". Teachers expressed the belief that use of the Internet in the teaching of French is "time-consuming", that it requires opportunities for "advance preparation" and that "availability of preparation time necessary to use the internet in class is limited". While a teacher may want to devote more time to the Internet, "There are so many demands put on teachers, it is very difficult to find the time to do all the things one would like to do".

Time can be consumed by "surfing aimlessly", by students "browsing the web in other areas", by needing to screen sources "so as to ensure that communication is in French" waiting for information to be downloaded, translating sites and posting student work on the Internet. Preparation time may be lengthened as the technology becomes more sophisticated: "je passe plus de temps à analyser une vidéo qu'à analyser un vieux film fixe ou une photo; je passe plus de temps à préparer, dans mon ordinateur, un exercice avec des liens hypertextes qu'à ronéotyper un texte, je passe un temps fou à essayer de suivre les trop rapides évolutions informatiques...".

The vast nature of the Internet can challenge the time that teachers have available to them: "I am constantly exploring new sites that friends or the listservs that I belong to recommend and trying to come up with innovative seasonal projects as well. There is so much material on the web and so little free-time to access it!" Time is necessary in order to plan properly in order to make best use of instructional periods: "Few teachers are willing to spend the time it takes to find sites, plan lessons around them and assess their effectiveness. Without that commitment, these projects can eat up valuable time and lead nowhere". Another teacher described needing the preparation time in order to reach a certain comfort level in the use of technology: "I can't seem to find the time to get prepared where I feel comfortable using it as a teaching tool".

In terms of teachers' beliefs about time and the Internet, the curriculum plays an important and conflicting role. Having sufficient time to devote to the curriculum may mean that there is not time for integration of the Internet as this teacher explains:

I'm afraid that the projects will take a long time to complete. I'm always pressed to cover all the objectives by June and I'm afraid that I'll fall behind by taking my students to computer room. The Internet seems like something extra that needs to be taught, even though i now (sic) it's supposed to be integrated into the curriculum like any other tool.

Some teachers in the study described not using the Internet more because of a lack of "instructional time to complete the prescribed curriculum". They noted that use of OLEs may actually decrease "the necessary instructional time needed for the completion of the prescribed curriculum". Concerns about time led one teacher to affirm that "Using the internet with young children is not using instructional time wisely". In the following excerpt, a teacher described in detail the challenges related to use of OLEs and time at the primary level:

The time needed to plan effective use of the internet is daunting. Simply finding appropriate sites takes forever when you end up with over 500 hits on a certain topic and those hits have links, and the links have links.. well, before you know it, you've been on-line for 3 hours and still haven't figured out what you're going to do for your internet class! This being said, I have to admit that this is very time-consuming. Working with young children always is. Typing even a few sentences takes forever, and when you add typing in a second language, correcting, using accents, etc., it's even worse. (And this is assuming that your computers are up and running when you need them). This is the problem with keypal activities, too.

Finding sites related to the curriculum that are at the appropriate level of difficulty for the students and evaluating if the sites are at a level the students can understand may also consume valuable time: "With such an intense curriculum, to use the Internet one must have appropriate sites to ensure objectives of lessons could be achieved and make maximum use of time". Teachers remarked that they already have plenty of resources with which they are very busy, that their program is "already so jam-packed full of activities, you have to make an effort to fit in an Internet activity usually at the expense of something else". Others explained that they cannot use the Internet because there is "too much other curriculum to cover". One teacher described the conflict between time, technology and the curriculum:

Our educational system works against these very valuable but time-eating learning projects. There's the "curriculum to cover" - always more than is ever possible even without the extra projects. Why do just two themes when we can do six? And what's wrong with a system that has kids and teachers running from one subject (sometimes even one room) to the next, with no time to reflect, to process, to - gasp! - relax? It drives me crazy. And as long as teachers are willing to play by those antiquated rules, the nouvelles technologies will remain just that.

As one teacher observed: "Every one of my colleagues says the same thing: "I'd love to do that (e-mail correspondence, joint research projects, global surveys, etc.), but I don't have time". The traditional curriculum always takes precedence, and 'covering the material' as laid out in the district curriculum guide is forever the driving force". Other teachers may argue that the problem is, not with lack of time and curriculum demands, but with the teachers themselves: "I think that teachers do feel pressured by many factors to cover their curriculum but I think the main problem why teachers don't "fit " anything else in is with the time-management skills and the motivation of the teacher." Personal factors may also play a role: "There is no free time at school and I have a very busy family life. Computers and technology are not 'interests' of mine. I tend to focus more on creative aspects of teaching (i.e. art, music, singing, writing etc.)." It may also be that what is needed to balance time and the curriculum is commitment:

The number one skill to master is time-management! Teachers need time to search out international schools that seem promising for collaborative work; time to correspond with teachers on the other end and to plan the course of action; time to look at their own curricular needs - either thematic (Native Americans, the human body, the rain forest, etc.) or linguistic (literacy skills, vocabulary development) and to embed those objectives

into the project; time to work on the project in class and still get in math, reading, science, etc.; time to assess the project and students' individual performance; and finally, time to learn the technical stuff. If teachers can manage all that, they have all the skills they need. But that is one huge task, and without a deep-seated commitment to looking "outside the box," that just ain't gonna happen!!!

Certain issues related to curriculum and teaching independent of the issue of time may, for some teachers, present challenges to use of OLEs. One teacher questioned the Internet's "relevance to the curriculum". Another noted that she did not "see a lot of benefit coming from it". Other teachers commented that "matching projects/activities with curriculum objectives is sometimes a problem" or that "the activities and lessons suggested are not conducive to Internet usage". Others explained that they do not use the Internet because they "...have a very good program to use and time is also a factor ...". Another teacher explained: "I do not feel that I need to use the Internet more often since it is important to vary teaching methods and resources to provide students the best opportunity for learning". Beliefs about what constitutes effective learning can also affect a teacher's willingness to use or interest in OLEs: "While a great deal can be learned from the Internet, it should not be used as the sole resource. There are many other valuable resources available which should not be overlooked simply because we, as educators, have jumped on the 'computer bandwagon'. Moderation and variety are the keys to successful learning".

Teachers may need to be reassured that there is indeed a benefit coming from use of OLEs. Curriculum outcomes and objectives must be the driving force behind attempts at technology integration according to this teacher's beliefs:

It is a resource, however, that needs to be used with specific goals in mind which require frequent evaluation to determine if the technology is indeed able to meet curricular outcomes. I find it somewhat disturbing that some educators feel they are progressive in their methods simply because they use computers. Again we must keep our objectives in clear view and ensure that students are benefitting from the technology.

Use of OLEs, on one hand, and the curriculum, on the other, may be seen as being in competition with each other. Teachers commented that "there is too much material to be covered in the curriculum to allow teachers to experiment with the Internet". This may be the case particularly for primary teachers: "I find the primary French Immersion program to be 'surchargé' already because we really have to build up children's language levels so that they can understand the materials and information which come at them everyday." The following primary teacher explains why she does not believe in encouraging online learning with her students:

Teaching grade 2 students to go on the Internet (regardless of Fre-eng) when they should be taught sound reading and writing principles seems to me to be putting the cart before the horse. Our curriculum is overloaded. Therefore one would have to be done at the expense of the other. Above all else, I want my kids to enjoy and value a good book.

Other challenges that were raised by teachers focused specifically on working in a second language in OLEs. In the following excerpt, the teacher argues that there are challenges that arise in online learning simply because of the fact that students are working in a language which is not native to them:

But most importantly, we are talkng (sic) about a second language here! Unless you happen to be fortunate enough to have French-speaking support in your media center, it is up to the teacher to provide the linguistic help that non-natives need to navigate their way through the Internet. Project-based learning is very different in the L2 classroom, where students' language acquisition is far below their intellectual abilities. It doesn't matter if you're in a third grade French immersion class, in high school or even at the university: unless your L2 reading level is on a par with that of your native language, everything takes twice as long, and the teacher's role as language resource is critical if students are really going to benefit from their time spent on the 'Net'.

The following excerpt presents the results of one teacher's attempts at conducting an online project. The teacher describes her frustrations with trying to teach her students how to design web pages in French:

I am pleased with the pages but I feel as if I did not meet the objectives of the French curriculum. Most (all really) of the classes in the lab were conducted in English. It is impossible to teach grade eight Core students how to do something so complicated using the French language. Also, because we have only 16 machines and each class has 25+ kids of varying abilities and motivation, several kids finished a week before the others. Add into this the students who were absent every time we went to the lab (they don't even have a web created!), and it made for some confusion

The conflict and problems evident in the beliefs in this sub-category highlight the problems encountered by teachers in relation to trying to organize their time in order to meet the demands of the curriculum and of working in OLEs. Increased training and support may not address all of the issues related to time and the curriculum, but, as the next section may illustrate, some teachers believe that the lack of training, support and a clear vision represent significant challenges to use of OLEs for the teaching and learning of FSFL.

5.3.2 Training, Support and Vision

As its title suggests, this sub-category groups beliefs relates to three areas. For some teachers, training is a type of support. For others, while they do not require specific instructions in how to use the technologies, they may require assistance, technical support, or moral support. The link between training and support, on one hand, and vision, on the other, comes from teacher's belief that, as part of learning how to integrate technology, they need to understand why they should integrate it, for what purposes, and with what benefits.

While some may think that teacher preparation programs would train teachers in how to make use of OLEs, often this is not the case. As one teacher noted: "I tend to fall back on the way I learned best which did not include the Internet (sic)." The fast pace at which technology changes can present an even greater challenge in terms of trying to keep pace and learn new skills: "Technology changes so fast, anything I would have learned in my schooling is outdated. (And I graduated in 1996!) The schools are all too often outdated themselves, creating a reverse problem, the new teachers understand how to use the new technology but the school (sic) has the old stuff." Texts, experience and university training are not always effective means of preparing teachers for use of the Internet:

Since I believe that there is such a thing as a "teacher's personality" (with all the suspicions these stereotypes justly evoke), I am sure that we tend to invest a much more considerable part of our preparation time for internet courses. We all tend more or less to be "perfect" and want our lessons to be adequate. Whereas experience and routine as well as textbooks (in the largest sense) help us as guidelines, we are completely helpless when attacking such a new thing as internet. Besides, we also have no idea of what kind of result we can expect. We also have a certain knowledge of teaching techniques from university - but for most of us this modern device was non-existent when we were trained.

The lack of training and, subsequently the lack of knowledge in how to make use of OLEs, results in high levels of frustration for some: "With such emphasis on technology/internet etc. in the schools now...I am extremely frustrated as a teacher because inservice in these areas is not provided. If I am expected to do it along with everything else I do outside of the many extra hours I work at home, then I say no!" The frustrations experienced by some teachers may also be accompanied by certain fears about using new technologies. In the following excerpt, one teacher expresses the belief that training must take into consideration teachers' emotional response to the new technology:

While I agree that children's learning opportunities are often severely hampered by the slow pace of teacher development and that even leading edge technology can wilt if teachers default to their old ways, we need to remember that many adults are petrified of this stuff....The focus in teacher development should be on tapping into the excitement of technology without putting a lot of pressure. It should be made clear that NO one is an expert, that we're all in the same soup learning along side our students and our colleagues.

In terms of teachers' emotional response to technology, training may be important in order to give them the confidence needed to believe that they can effectively deliver a lesson. As one teacher commented: "In terms of adjusting, I am still a lot more cautious than I would like to be about using the technology....I feel great when a lesson works well, but I don't relish the sense of nervousness I feel before a lesson!" The nervousness experienced by teachers may lead them to avoid using computers because they "feel intimidated by their lack of knowledge". Concerns and fears about wasting time or about the perception of colleagues may, as well, discourage a teacher from making use of the Internet in teaching:

Je crois qu'Internet sert beaucoup pour une classe, tantot quand tout le monde est ensemble, tantot pour un travail individuel. Mais je ne sais pas comment utiliser Internet dans ma pratique quotidienne, j'ai peur d'amener mes étudiants au centre de ressources et perdre les 40 minutes de classe d'autant plus que les professeurs de langue ne sont pas censés utiliser cet espace. Nous avons notre laboratoire avec audio et vidéo. Il y a beaucoup de résistance au changement et si je vais au centre et que je perds mon temps, ça ne va pas être très agréable. Au fait, je veux travailler avec Internet en classe de FLE mais je ne sais quoi ni comment. Un vrai problème, n'est-ce pas?

Feeling "comfortable" is important to some teachers in terms of their willingness to use the technology in the classroom. One teacher commented that she was "Only at (sic) basic stage of being comfortable with Internet". Another commented: "I tend to rely on the tried and true. I guess I don't feel comfortable enough with it myself to show stuff to students." And another: "We have a long way to go before the 'net' becomes a comfortable part of our school day. A lot of money is pent (sic) on hardware/software but not on support/training." To feel comfortable using the Internet, teachers may believe that it is important that they know more than the students on the subject: "I don't feel comfortable myself using the Internet. I feel that when we use it as a group activity I know less than most of the kids". Without adequate training, teachers may feel ill-equipped to help students: "I do not feel like I have adequate skills to help my students utilize the Internet"(sic). The lack of comfort with technology led one teacher to conclude: "If I cannot do it myself I cannot teach it".

In terms of training, some participants in this study believe that teachers need skills "to fix things", "to find the information" needed, and "to use it efficiently in class". They require "inservice on ways to integrate it into the curriculum" and "further instruction on project based learning" as well as "appropriate follow-up on an on-going basis". Some teachers in this study indicated that were very willing to use the technology, recognized its potential, but needed training in the technical aspects of using the Internet:

Quant à l'Internet comme instrument de recherche...j'y vois plein de potentiel sans avoir appris à en profiter. J'ai toujours de la difficulté à accéder au RFI par exemple, parce que "download RealPlayer" n'a jamais réussi. En bref, je suis consciente du potentiel, mais je reconnais que les profs qui sont beaucoup moins enthusiaste que je ne suis et qui connaissent les problèmes techniques que je connais n'y arriveront pas.

Teachers are also interested in "knowing what sites to access and what the objectives of using the sites are". They are interested in "knowing which sites are appropriate" and "knowing what sites are available" and which ones "fit with the prescribed curriculum". One area in which training may be lacking and needed is in the identification of appropriate resources and activities. Teachers indicated that there is a "lack of info about suitable on-line activities or uses" and that they "are not aware of sites" which correspond to "curriculum outcomes". Another noted that if teachers knew good sites, they would be able and willing to access them: "If someone could point out valuable sites or activities to me, I'm open to becoming involved".

Knowing which sites are available and which ones are appropriate represents a type of training from which some teachers would benefit. Others may also believe that they require training to understand the vocabulary and to have a "knowledge of the computer terminology in French":

I think the greatest pitfall in foreign language education is the fact that teachers often do not know this vocabulary in French themselves and so fall back on the English out of expediency. High-school teachers who have relied primarily on text-book language would find it extremely difficult to teach computer-related skills in French. And then to get onto the Internet and encounter texts cold - with no chance to look up new words - can be very threatening to teachers who are used to following a text book. I applaud those teachers who have taught themselves the lingo and who work on their reading skills so that they can be effective teachers in improvised situations. But I don't think many teacher-preparation programs include this kind of learning experience.

For some teachers, training represents a means of understanding how to integrate sites into pedagogical material: "For me, the internet is like a huge resource centre full of partially catalogued (sic) books. I need somebody to help me find what I am looking for because I don't have the time to read each table of contents for those books not yet catalogued....The part I find the most frustrating is finding the time and energy to decide how these sites will be useful to my students". Training may help teachers understand, not only how to use the technology, but why to use it. Some participants in the study indicated in terms of the Internet that they were "not aware of its value in improving learning" or that "We would need a reason to go online" or, as another teacher stated: "I would need to decide exactly why I am using the Internet with my class". Others need concrete suggestions or ideas about what they might do with online resources and tools: "Maybe it's because I'm not very creative, but I have difficulty coming up with ideas for projects which could incorporate the Internet".

Not knowing how to integrate use of OLEs into present practices presents a significant challenge to some teachers: "I must confess I am one of those teachers who believes that the internet is a very useful teaching tool but have not yet figured out how to incorporate it into my teaching on a regular basis. I have not yet learned how to create a web page and my main use of the internet at present is for e-mail and discussion (sic) groups." In spite of an interest in and willingness to use new technologies, some teachers may be completely unaware of how to exploit the material pedagogically:

Mon problème est que je ne sais pas trop comment utiliser l'Internet en classe. C'est qui me manque est une formation pour transformer ce que je trouve en Internet en outil didactique. Peut-être n'y a-t-il pas une formation de ce genre? Et c'est nous les professeurs qui devons trouver l'utilité didactique à Internet? Avec d'autres outils (articles de presse, K7, vidéo), je sais comment les utiliser car j'ai été formée pour cela. Sauf peut-être pour la vidéo, mais j'ai lu des livres du type "La vidéo en classe de langue". Mais en ce qui concerne Internet, je me trouve face à un support très riche, varié, hétérogène et je ne sais pas m'en servir du point de vue pédagogique. Ça me passionne les endroits que je découvre, mais que faire pour transformer cela en matériel didactique?

In the following excerpt from a discussion with one of the study's participants, there is a criticism of certain approaches taken to training in use of OLEs. The individual argues that too much emphasis is placed on technical training and not enough on the pedagogical training needed by teachers in order to effectively integrate OLEs into their teaching:

Les nouveaux paradigmes pédagogiques ne sont pas perçus, appréhendés, -donc non-appropriés-, par les enseignants. Ils continuent à travailler comme par le passé sans information et sans maîtrise des outils. Les formateurs des enseignants sont surtout familiers des technologies informatiques... De ce fait, l'accent est mis sur la technologie informatique, les réseaux, comment ça marche...; rien sur les usages, encore moins sur la nouvelle pédagogie à prodiguer. Je peux compter l'expérience d'enseignants qui à l'issue de 5 jours passés en formation, ne maîtrisaient pas la recherche l'information sur les moteurs de recherche.....Ils ne reçoivent donc aucune formation à l'accompagnement pédagogique, tout étant mis sur la maîtrise technologique, à savoir faire fonctionner la machine, (ce qui peut bien sur dépanner les profs en peine de le faire), mais les élèves dans ce cas sont laissés à leur appréhension faute d'un projet d'ensemble.

While some may believe that there is too much emphasis on technical training to the detriment of pedagogical training, others may argue that without the necessary technical training which must come first, teachers will remain essentially fearful of and uncomfortable with the new technologies:

Internet, c'est d'un seul coup pour des profs étrangers souvent beaucoup plus isolés et limités dans leurs pratiques de classe qu'on ne croit, quelque chose d'infiniment ouvert et qui donne le vertige. Dans un premier temps, bien comprendre ce qu'on peut faire avec l'outil rassure. La formation ne doit en aucun cas faire l'impasse sur les différents usages et sur les pratiques nécessairement participatives qu'ils induisent mais dans un second temps. Si l'enseignant se sent dépassé par la machine, il ne peut en aucun cas apporter une dynamique à sa classe, déterminer des objectifs et évaluer des travaux. On n'est pas sérieux envers les enseignants en leur laissant croire que la technique est vite apprise qu'elle n'est rien. Non, elle est un préalable parfois difficile à assimiler, qui demande des répétitions, de la pratique avant de l'oublier pour se consacrer à l'essentiel: les questions pédagogiques. Si on oublie ça, on crée des gens mal à l'aise avec les nouveaux outils qui n'osent avouer leurs peurs parce qu'il faut être moderne et connecté.

A similar belief about the importance of technical training as a prerequisite to pedagogical training is expressed by the following participant in the study:

En clair, avant de parler des usages d'une technologie comme Internet en classe de langues, il faut de leur point de vue apprendre d'abord à se servir de l'outil. Inutile d'explorer les ressources disponibles sur la toile si les techniques de sauvegarde d'une image, d'un texte n'ont pas été assimilées. Inutile de savoir quels sont les avantages pour la classe d'une correspondance électronique si on ne maîtrise pas correctement un logiciel de messagerie. Il faut un minimum de maîtrise de l'outil pour aborder les questions d'ordre didactique.

In some cases, teachers may not believe that it is training which is required rather it is an increased level of support from administrators: "Some administrations do not give release time and/or make compensatory accommodations for teachers who want to integrate technology into the curriculum and assess its effectiveness in reaching curricular objectives". For others, it may be technical support which is required: "I teach in a small school where computer literacy especially trouble-shooting is limited. This discourages computer use in my very busy demanding teaching day". Support can also take the form of providing teachers with a desire to want to change and to try something new:

All too often teachers are left in their room and the only support they have is their textbook and the other materials dictated by the powers that be! No wonder they don't want to change. We work so hard to create excitement in our students and hope that it will spread through the rest of the class, that we forget to fuel the excitement with other teachers.

Another form of support is that which comes from fellow teachers: "I believe more teachers would be more apt to use the Internet if they had more support and training. Anything I see done at present is all done through the individual teacher's initiative. There is not much mentoring between the teachers that do know how to use technology and those that don't". The lack of mentoring may be difficult to achieve when fellow teachers have different beliefs about what it means to teach effectively. The following teacher describes her beliefs about colleagues' reaction to her use of technology:

I am considered a nut, albeit a nice, friendly one, by my colleagues. Nose in the computer, out of touch with "reality" and so on and so forth. For years, I tried to convert them, with absolutely no success, but occasionally with some backlash. Please note that my colleagues are all hard-working, very dedicated teachers whose goal is to get their students (university level, ranging from beginners to advanced) to master the French language and literature. But they are convinced that the only way to do this effectively is for the teacher to be the almost-only source of input of knowledge. (the almost part consists of supplemental materials, carefully chosen, such as slides, video, audio and even the occasional web site - the latter being rare). There is an unspoken, perhaps unconscious, distrust of the ability of students to learn on their own... they must be carefully led to knowledge and that knowledge structured according to the priorities of the teacher. And testing... sigh... I can best describe that sort of testing as a regurgitation of what the teacher has tried to instill, mostly in terms of grammar correctitude (yes, I know that's not a word).

Teachers may have different beliefs about teaching and learning that can affect their interest in technology integration. The newness of the Internet can affect teachers' beliefs about its usefulness and result in less support for teachers interested in making use of it. One teacher described her experience and beliefs about her colleagues' perceptions in this area: "Since I am delving into "waters" as yet unexplored I have little support from my colleagues. (Many of them think the use of technology in the classroom is a "passing fad" and are unwilling to use it.)". The

perceived lack of support may result from different levels of enthusiasm and interest in using OLEs:

My frustration is that few others at our school share this enthusiasm, and without that sense of adventure and excitement, it is hard to be motivated to put forth the extra time and effort that Internet projects require. I do not really fault my colleagues; we are so overwhelmed by the demands of teaching in an immersion program where everything has to be translated, adapted and squeezed into too few hours. Teachers are stressed and tired (and it's only October!) and just want to get through their curricula. And the biggest reason for the apathy is the lack of tech support available to us. Every year we get more and more equipment but no added time to learn how to use it or how to implement it in the classroom. Most teachers have simply given up.

As the beliefs in the previous excerpts have shown, there are many issues related to training and support for use of OLEs in the teaching of French. A further issue raised by participants in this study is that of the ultimate aim of training and support. The following excerpt suggests what this aim should be by pointing to the pitfalls of lack of training and development:

The one piece that is crucial to the success of Internet-based teaching - and which is so often lacking - is staff development. As I mentioned above, without good tech support to ensure that equipment is working, teachers lose interest. And without staff development time (which means \$), we will continue to teach in the same old way, tinkling with machinery but never really redefining how we teach. New technology has to mean new teaching practices, but we are not there yet.

A similar insistence on changing existing practices and on forging new paradigms is expressed in this criticism of the current vogue of interest in new technologies in France. The individual's criticism points to a need to move beyond a purely technological vision in the use of OLEs:

L'effet de mode "NTIC" qui sevit en France conduit a sur-valoriser la technique, le cote marchand, a en faire un passage oblige; certainement pas a insister sur les nouveaux usages, sur les enjeux pour la formation des jeunes, sur les nouveaux paradigmes dans l'apprentissage (sic) et dans le rapport au monde, sur les nouvelles ecritures, etc..., bref a indiquer les tendances et a clarifier les reels atouts de ces technologies pour repondre a des besoins identifies. Pour moi, ces comportements ou attitudes recelent un risque potentiel de derive, d'echec dans l'introduction de ces technologies dans l'enseignement si on en reste a une vision purement technologique.

While a vision that moves beyond the technical aspects may be necessary for effective use of OLEs, still, some maintain that for full integration of the Internet into teaching, large-scale systemic change as well as changes in thinking of teachers, parents and students will also be needed:

If we accept that the majority of education will be conducted by means of the internet, then we're going to have to start from the bottom up, demolishing ivory towers and

slaughtering sacred cows on the way. *All* of us would have to be re-educated, though some (like me) would need more re-education than others. That's a big "if". Those of us in the trenches know it would take a while, even if accepted philosophically, because it would require incredible amounts of money to implement. A lot of our colleagues (sic) are very comfortable with the way things are now. So are a lot of the parents of the kids we teach. So are a lot of the folks in the universities who are teaching our soon-to-be-colleagues. If we, as a society, decide to go this route, there are a *bunch* of challenges ahead.

Having a vision and wanting to bring about change may require facing many "challenges ahead". The beliefs expressed in the following excerpt suggest that such challenges may be insurmountable:

In order to implement this degree of change, we'd have to teach the teachers how to use the internet, and help guide them toward developing their own courses. Then, we'd have to cut class size down from the present 25-30 student average to about half that many kids. We'd have to give teachers prep periods (most Alabaman teachers do not have prep periods during the school day - if you need to prepare classes, you do it at home, or at school before and after the school day). While doing this, you have to convince the State Board of Education, the parish (that's Alabaman for county) school board, and the parents that you're doing the right thing. Re-reading this, it sounds an awful lot like whining, but that's not the point. I just wanted to point out that there may be reasons other than conceptual disagreements to not hurtle into using the internet as the primary resource for teaching.

A further challenge to bringing about full integration of technology into language teaching relates to the difficulty in changing the way people think. In the following excerpt, the teacher is critical of repeated attempts to change ways of thinking, practices and roles by introducing a new tool:

Les formateurs devraient être des pédagogues familiers des concepts et des usages d'une pédagogie active, bien-sûr mais d'un autre côté on ne peut pas changer brusquement les mentalités. A chaque fois qu'un nouvel outil fait son apparition dans la classe de langues c'est la même histoire, on veut tout lui faire porter..et les mêmes discours messianiques reviennent..on va bouleverser les pratiques pédagogiques, on va faire du prof un incitateur, un facilitateur et l'élève va se former seul avec la machine,etc..

Some may argue that what appears to be a vision for technology integration is nothing more than an illusion. In the following excerpt, a teacher reflects on what can happen as a result of having a view that is too technocentric:

Beaucoup de décideurs et d'enseignants sur-valorisent la technologie (ce que j'appellerai "l'illusion technologique"); aucun accompagnement à la mise en place de projets pédagogiques n'est réellement mis en place, ni suivi et évaluation a fortiori....j'employais le terme d'ILLUSION TECHNOLOGIQUE pour dénoncer 2 types de comportements: - le premier qui consiste à ne voir la technologie que comme une fin en soi, un but. On

achete, on installe des équipements (micro-ordinateurs et modems, le plus souvent des PC bas de gamme peu évolutifs, peu chers pour avoir le maximum de machines, achetées chez l'assembleur du coin, mais avec tous les problèmes de maintenance que cela induit très vite et très souvent) et pour le reste, - à la fois les contenus pédagogiques, les usages pédagogiques, les logiciels éducatifs, les budgets pour un réel fonctionnement (ne serait-ce qu'une ligne téléphonique dédiée à l'Internet, les coûts de connexion, ...) ne sont pas pris en compte par les financeurs ou l'Éducation Nationale. Cela est laissé aux établissements qui ont toujours la même enveloppe de fonctionnement et cet aspect peut être critique.... Pour développer un peu plus ce concept d'illusion technologique, - et cela est mon deuxième point -, ce discours technologique est devenu dominant dans la bouche de quelques universitaires en sciences de l'éducation, ceux qui découvrent ces technologies aujourd'hui et qu'elles fascinent plus qu'ils les utilisent. Tous les problèmes d'accès aux savoirs, à la formation, etc... seraient résolus grâce à l'Internet, l'extranet, l'intranet, les Cd-roms... sans distinguo. Il y a là un mythe sous-jacent. On s'achemine ainsi à former des "développeurs" de produits de formation, pas des pédagogues Nouvelles Technologies Éducatives...

Myths, illusions or visions? The beliefs expressed in this section on the challenges related to use of OLEs suggest that the issues of training and support are indeed complex issues particularly because they relate to larger issues or questions such as: Why are we using the technology?, How should we use the technology? and, Should we use the technology?. The following section considers other challenges related to technology use. These challenges relate less to theoretical issues such as visions and changing mentalities, and more to practical issues such as having the required equipment and obtaining online access.

5.3.3 Access and Equipment

While many of the beliefs about the obstacles to computer use may relate to human factors, some of these beliefs relate as well, to strictly technological issues such as lack of equipment, unreliable equipment or access to services or to the computer lab, slow connections and lack of technical assistance. Teachers' reluctance to use the Internet in teaching may be related to lack of access to the Internet at home: "I am not connected at home so I find it time-consuming after school to prepare lessons." In other cases, access may only be available outside of school at the local library. Newfoundland teachers are provided with ten hours per month of free online access through STEM~Net¹. However, teachers may find such access to be insufficient if they have to use this account for student projects. One teacher explained why she would not use OLEs with her students: "I presently would have to use my own stemnet acct".

¹ STEM~Net is a computer network for professional K-12 educators in the province of Newfoundland and Labrador, Canada.

Even within the school, access may be limited: "We can only access the Internet from the resource centre where there are only 4 computers-it is simply a waste of time if you have 25 students wanting to get online. So we direct students to more traditional sources using the internet where possible". One option to limited access might be to send students off to work on

their own on the computers either in the computer lab or the resource centre while the teacher continues working with the rest of the class. Such an arrangement may appear practical to some teachers but not to all:

Working independently on the Internet is, for many students, not an option. For younger children, there often is not the freedom to wander in and out of the media center without their teacher. And high school students have one period a day in which to work on their project. If there are computers in the classroom, there's a fighting chance that a few kids at a time can work at the computer, but it is unrealistic to think you can get twenty-five kids through a project without a computer lab and a set time to work on it.

Where access is available, connection speeds may not suit the needs of teachers: "Internet access is somewhat slow difficult in our region as our phone lines seem to be of an antiquated system and the long distance call is a disadvantage also." For some teachers, lack of access to equipment may represent an obstacle to use. The fact that there is "...not always one computer per student" may discourage integration by teachers: "I don't use it more because in many cases I would prefer for the students to work on individual computers". As one teacher explained, frustrations arise, as well, from having "to work on outdated computers" or from situations where there are "not enough computers in working order". Teachers may respond negatively to arrangements whereby students must work in groups of two or three on one computer: "I just wish I had one computer for each kid, we only have 10 in the lab and they double or triple up on a machine--not too much fun". In some cases, computers may need to be shared among large groups: "I have "dabbled" with the use of the internet in my classroom but found it difficult when there was only one computer for 25 kids in the class and no computer lab in the elementary school".

Lack of access to computer labs represents another perceived obstacle to use of OLEs in teaching. Teachers in this study described how, "all labs are busy" and how "booking the facilities is difficult due to a high demand by other classes". Some described the computer lab as being "too widely used". Lack of access is attributed in some cases to competition with courses such as science and math: "I have to book the computer lab-which is practically in full use with computer science courses." One teacher described the importance of lab access and the challenges faced by language classes in gaining access: "The other issue of lab access is critical, especially in secondary schools. I hear all the time how low on the priority pole language classes are in terms of scheduling lab time. Business, math tech ed. are placed first. As was mentioned by another Credo contributor, we have to accept that students will have to use other means to gain www access, e.g., home computers, libraries."

The issue of reliability of equipment and access is critical in terms of being able to work effectively in online environments. Teachers described how: "all sorts of things go wrong", "the network is a problem because it crashes" and a teacher "could have a lesson planned and the Internet is down for the whole period". Problems with reliability may appear overwhelming at times: "Half the time, all the computers are not up and running. If a kid is lucky enough to find something, then most likely the printer doesn't work. One hassle after another". For teachers who have planned an entire lesson around use of the Internet, reliability of access is important: "It is sometimes frustrating when you plan and the network is down or you can't get access". The

experience may also appear "frustrating for students who lose site (sic) in the middle of researching due to computer freezing." The frustrations with limited access and unreliability of equipment may relate in part to the belief that teachers have little or no control over the technical problems that might occur when trying to use the Internet:

The limiting factor for me is computer lab time, and reliability of equipment - it is a very common situation to go into the lab and have half the computers not work, or work extremely slowly...I can be flexible about a lot of factors while teaching, but it is more difficult when one feels that the factor is out of one's control to a certain extent. It's tough on the students (as well as the teacher!) when they are expecting an activity-filled, profitable period and they are twiddling their thumbs while I try (mostly without success) to get cranky computers to behave.

In addition to problems related to accessibility and reliability of equipment, there is the problem of speed of access and accessibility of sites. One teacher described how "connections are slow and lots of times the lines are overloaded". In the following excerpt, a teacher describes her experiences with the problem of slow access:

Well, after seeing how others are incorporating the internet into their second language classes, I decided to try a very small project - just to add a little variety to the lesson. I intended to have the grade nine Core students access a site about Celine Dion since the info in their text is outdated (according to the text she is still single, etc.). I just moved to a new school with newer computers than my former school so I figured I was all set! Luckily, I decided to access the site from school before trying it with the class; after a 10 minute wait, the server still had not accessed the site! Imagine if this happened during class with 25 "bored" 14 year olds!

Access may be unpredictable thus forcing teachers to come up with alternate solutions:

Unfortunately you are at the mercy of the server and the time of day. My morning classes bring info up faster than afternoon classes because of user demand at those times. I always have them take their books to the lab so if worse comes to worst, they have an alternate activity to do. Sorry, I can't offer any alternatives. If it's a good class, we usually just sit there and chat until something happens or the bell rings.

Some of the solutions to problems with access may involve use of specialized software and extensive planning:

I have used webwhacking programs (WebWhacker and WebBuddy) to simulate web navigation of one site; this allows limited ability to delve through several layers of a site. This was useful in exploring WWWPals, a site for establishing e-pal and pen-pal contacts world-wide. Students could select their country and individual "on-line", then move to pen and paper, then word-processing to create a letter. I uploaded them myself from one computer. It is often up to the teacher to find sites and on-line resources, download them

to paper, develop class activities, save student products on network files or disks and then upload them to the site. Is it ideal? No.

For teachers in France and some parts of Europe, access to OLEs may be made difficult because of the associated costs. As a result of these costs, some teachers may believe that the value of use of OLEs does not measure up to their costs: "...je suis persuadé que deux ou trois profs se lanceront dans cette nouvelle aventure, mais la grande majorité d'entre elles a estimé qu'au prix de l'abonnement et des communications téléphoniques, le jeu n'en valait pas la chandelle".

As the beliefs in this section have generally indicated, lack of access and suitable equipment as well as high costs present numerous challenges to teachers and may, in some cases, discourage use of OLEs. In the next section, beliefs about the need to control and monitor students' online activities point to other challenges faced by teachers while teaching in online environments.

5.3.4 Control and Monitoring

Monitoring and controlling what students access and do while online presents an important area of consideration for many teachers. Beliefs about this issue were expressed frequently in the context of this study. Unlike the classroom where natural limits or boundaries may lessen the need for control and monitoring, OLEs were described by some participants in this study as presenting challenges in terms of control.

One belief expressed was that teachers have less control over the pedagogical material which their students access while online: "I try to help my students learn how to find the answers. With the Internet I don't have control over what vocabulary is used or the complexity of the grammar structures". An additional concern for teachers in terms of control relates less to monitoring vocabulary or grammar and more to ensuring that students remain on task and at sites where the teacher expects them to be: "Some students are extremely adept at using the Internet. This is a problem because they start going into areas where they should not". The issue of control relates to a broader issue of students accessing "inappropriate sites" as well as to the issue of determining when the browsing is pedagogically acceptable and when it is not: "The most difficult part is the control. It is wonderful to let a student go and discover what s/he may and watch the excitement. But how do you grade that? Or how do you let them wander and yet still put boundaries up in way of proxies and supervision in the name of what is fit for the classroom and what isn't".

In the excerpts that follow, teachers relate experiences they have had in relation to the issue of control and their beliefs about how best to deal with this issue. In this first excerpt, the teacher explains how it is the role of the instructor to ensure that students act responsibly while online:

One other problem is, of course, the inappropriateness (to put it mildly) of many sites - sites that kids can stumble upon quite innocently. I was doing a search on Paris attractions recently and in no time at all found myself at the Folies Bergeres, and you can imagine what that page had to offer! We do not have to take on the role of Internet "vice squad," but it is our duty as adults to help our students - especially adolescents - make appropriate

choices. The presence of the instructor and other students can help kids be responsible "cybernautes."

The teacher's role in ensuring that students access "appropriate sites" is described by the following teacher as one of choosing sites, guiding them and monitoring their online activities:

I would not have the students do a general search without guidance! I saw what that could lead to in a music class, where, the music teacher was doing an activity in the computer lab with my class. Ten minutes before the end of the class, she decided to let them do a search for the "Spice Girls" which the students had been requesting. Well, the results of that search certainly were not appropriate! We must be careful and guide the students to appropriate web sites that we have chosen and that we continue to monitor.

The following teacher's beliefs about her role in controlling access to sites consists of more than just guiding students. Here, the teacher stresses the importance of ensuring that students access only sites which are at an appropriate pedagogical and age level by putting in place both guidelines and consequences:

The adult level of most www sites -- in terms of interest and reading level means that teachers and parents must be vigilant in supervising children and/or must set up very clear guidelines and consequences for on-line behaviour. Our school requires that all parents and students sign an appropriate use policy at the start of each school year, and our computer program goals include enabling students to become powerful searchers and responsible thinkers.

While some beliefs emphasize the importance of control, other beliefs focus more so on the need to educate children about uses and misuses of computers:

Il ne s'agit pas tant de mettre un policier derrière chaque ordinateur que de faire un véritable travail pédagogique en apprenant aux enfants tout ce que permet de faire un ordinateur (et le réseau) mais aussi quels en sont les dangers. C'est pourquoi, dès la rentrée prochaine, nous envisageons de mettre en place un petit groupe de pilotage internet, composé d'élèves volontaires qui seront chargés (sous le contrôle du responsable informatique) de rechercher et mettre en forme des informations qui seront alors mis à la disposition des autres élèves du collège. N'oubliez jamais qu'il est rigoureusement impossible de suivre chaque ordinateur, ne serait-ce que parce que nous n'aurons jamais les ressources humaines suffisantes et que les logiciels seront toujours, en ce qui les concerne faillibles. Par contre, un véritable travail d'éducation s'impose et ce d'autant plus que de nombreux enfants disposent d'accès au réseau chez eux, c'est à dire là ou nous ne pouvons rien contrôler.

Another approach to monitoring students' use of the Internet is through extensive preplanning on the part of the teacher. In the following excerpt, the teacher explains how such planning aims to encourage effective and efficient use of students' online time by ensuring that classes are interesting and goal-oriented:

For me, the crucial element is to have the period planned well, otherwise the temptation is there for the students to start surfing if there is any down time. I find that if there is a set project with a goal, they will focus and work time-effectively. We have Cyber Patrol as our filter but some of our students are so computer-savvy that they are up to no good in seconds and bringing everyone else with them! I try to make the internet classes interesting enough to keep their attention, but also language-related and this unfortunately requires a lot of preparation and ultimately, correcting as they must pass in the completed assignments by the end of the internet class.

In spite of attempts by some teachers to ensure that students do remain focused on the task, maintaining students' attention can present serious challenges: "I just had them surf on 3 sites and I thought they would enjoy them and they did, but only for about 5 mins each. It was impossible for me to keep them on track after they had fulfilled their part of the bargain and investigated the sites". Some teachers believe that they can ensure student control by preplanning and preselecting the sites which students can access during the lesson and by disallowing random browsing:

I do not conduct many classes in the computer lab that require random browsing. Usually the students must do a guided search or I have pre-selected the sites that they must visit to find out certain information. During a 40-minute class it would be impossible to have much constructive on-task work completed if students were permitted to randomly browse sites.

Preplanning can involve previewing sites. For the following teacher, previewing sites is combined with intensive monitoring and consequences for those who go where the teacher does not want them to be:

...I most often preview the site I want a pair of students focusing on---I also rove around constantly, and found one day last year a student who had quickly reverted to his Metallica homepage---I hollered and told him he was off navigating (my chosen site) for at least a week. The fact that he had to keep his fingers still and go back to the 'old way' of learning a FL scared the heck out of him, and it never came up again. I also threaten that I will review the "GO" button on the tool bar to make sure everyone has followed la bonne piste. Of course, I never do, like who has the time? Three teachers use my classroom during the span of two days (A/B Block)..we barely have enough time to close down the server. I am never in my room during the day, which makes pre-planning a must, especially on the Internet.

Testing sites or previewing and strictly controlling which sites students visit may be a solution to the problem of control for some teachers but it is not believed to be a solution by all: "Something I gathered from reading the various mails is that most colleagues seem to "test" all the sites beforehand. I doubt that this is the use of the possibilities of the net to its full, because pupils are much more inventive and likely to try out things (i.e. sites) we would not think apt or even find."

Consequences such as revoking students' computer privileges is one means of ensuring that students do not "abuse the time allowed in the lab":

I have one guy who is a comp. whiz and he is playing muds and moos in class and knows that I know less than he so he can hide what he is doing most of the time. It's frustrating but I will be revoking his computer privileges soon if he continues to do this. I guess that is my ultimate threat...they will lose comp. privileges and sit at the desks if they abuse the time allowed in the lab. Simple as that.

Teachers' beliefs about the need to control students' online access may relate to external pressures to guard against students accessing inappropriate sites:

I live in a very religious, small community. Our network goes through a proxy which hopefully filters out any undesirable sites. However our district is very worried about something going wrong and watches everything we do. Because of my strong desire to keep our access to the Internet I am very much like a dictator on what they are allowed to do.

Placing restrictions on how and where students "surf" while online as well as having a carefully controlled lesson represents another way to ensure that students' online activities are acceptable to the teacher:

Next time they will have an objective for each of the sites that they will either have to pass in or I will circulate and verify they have written the answers down. It still boils down to guided surfing, Elizabeth. It's all fine and good to think you're restricting them but they're only kids! Most of them don't have internet at home and they are desperate to explore their own sites and will sneak them in however they can! So..preplan..visit the site before the kids, make sure there is an objective for the lesson that can be evaluated at the end of the period and be vigilant.

In spite of the teaching and learning value of certain sites or technologies, the lack of control available to the teacher can discourage use of such technologies: "I have used chat lines to speak to friends in other countries; we have used live chat and it is a great technology. However, I would not use chat rooms on the Internet with students due to the lack of control that we would have over topics that could be addressed".

The issue of control in the second-language classroom, can also present itself in the form of monitoring students to ensure that they are working in and with the French language as opposed to with their mother tongue. Monitoring becomes even more essential on the Internet where so much material is available in English. The following teacher explains the approach she takes: "For elementary core French, I must preview sites in order to find visually-rich pages with child-level language; otherwise, kids will go to English sites and translate later". Monitoring students while they are online is important to some teachers in order to ensure that they make effective use of instructional time as the following comment suggests: "I would not want my students to waste too much time while doing their research". Guiding students may be necessary given the nature of the Internet and the broad array of information to be found there: "Since there is a lot of info to

be gotten on the 'net' i (sic) feel that a teacher would need to guide the students closely with assignments." Such guidance may result in fairly elaborate strategies to ensure that students are capable of working effectively. These strategies result in a highly controlled activity:

I make a point of using <http://www.altavista.com> as a search engine because of its ability to do rudimentary translation of sites and text. As well, I ensure that projects are simple enough and have lots of frame language (i.e., repetitive sentence stems or criteria blanks — find out xyz about n) so that students can weed through all that information to find key points. One strategy that I have used is to locate the sites(myself) that the students will be required to visit. Then I prepared my activities by requiring the students to find specific information. In this way, the students are not so overwhelmed by the amount of text that they are presented with. I make sure that the material is not too difficult by reading it through in advance of assigning a project that would require the students to use the Internet...

The issue of control and monitoring focuses more so on students themselves than do issues related to training or time-management. The beliefs in the next section centre specifically on students' interests, reactions to the technology and skills and how these may present challenges to teachers in the use of OLEs.

5.3.5 Students

Challenges to Internet use faced by teachers can result from many factors. It is not surprising that teachers believe that students themselves should present some of the challenges since it is students who ultimately are the focus of all teaching and learning efforts. In this chapter's section on teachers' beliefs about the advantages of OLEs for learning, OLEs were described as an effective means of meeting the changing needs of students. Students' attitudes, fears, reactions, skill levels, interests and willingness to accept change are some of the factors teachers believe challenge their ability to effectively promote learning in OLEs. As the following section will illustrate, not all teachers believe in the capacity of these environments to effectively meet students' needs.

Participants in this study focused on the issue of students' willingness or openness to change. One teacher concluded the following on this issue: "So with the technology, unless you are going to use it consistently (sic) the students don't want to change, or get used to a new idea". The following teacher's beliefs illustrate her experiences with integrating technology and her students' subsequent reactions with use of an approach that is not transmissionist in nature:

Student reaction: the top 10 % love my approach - lots of messages to the effect that "no one has ever asked me to tackle a topic on my own"and so forth. But then I wonder: the top 10% can survive quite well under *any* approach. The middle 50% sort of humour me: oh - is that what she wants? Fine, I'll do it that way... Then there's the bottom (40% or so) who fiercely resist the approach. They want to know THE TRUTH, THE ANSWER. They think in black and white terms, even unto the fourth year of university. They want to be able to take notes, memorize rules, and pass the exam based on those

criteria. Under the old regime, I used to get evaluations which rated me as excellent as a teacher, but not very open to student opinions. Now I get so-so as a teacher (that 10% excepted) but *very* open to student opinion. In terms of promotion and tenure, that's not exactly a plus. Now why do I persist??

In this chapter's section on advantages of OLEs, beliefs in the sub-category of teaching and learning referred to how online learning entails a change in the role of the teacher requiring her to become more of a guide or facilitator for learning. The following excerpt explains how one teacher believes that, because her students are unaccustomed to the role of teacher as facilitator, they are frustrated by it:

I would like to be more of the facilitator but my students are not used to teachers being in that kind of a role. They prefer the "holder of all knowledge required to pass this class" role. Many students get frustrated with me when I answer their questions with another question. I try to get them to see the pathway they should take to find the answer rather than just giving them the answer. As a facilitator the students take charge of what they learn and how they learn it.

The frustrations experienced by students unaccustomed to new approaches or methods are also experienced by teachers. One teacher explains how her beliefs about teaching and learning are not shared by all of her students:

At the beginning of this list someone (sorry I don't remember who) posted "Seymour Papert -in his book-"The Connected Family" argues that we are moving away from the 3r's and towards the 3 x's: explore, express, exchange." I wholeheartedly believe this. Now I just have to convince my students that they too need to change. The dilemma I find in my classroom is that some of my students are longing for this 3 x education while others will not let go of the 3 r's. I am working to help my students move forward and get frustrated.

Particular approaches to teaching such as exploratory learning may or may not suit the learning styles of certain learners. This may be particularly the case when learning a second language in OLEs. The following beliefs emphasize the complexity of learning styles of second-language learners combined with Internet use:

If students have not learned basic investigative skills needed to explore the Internet, they will not learn them through SLL... in fact, trying to master language skills while exploring the Internet in its cultural applications may be an exercise which frustrates those who learn deductively (left-brain). The inductive crowd revels in it, but I've found they're in the minority. There's a large group in-between, but for many of them, exploratory learning is something done under duress rather than out of an appreciation for the approach: the activity is required for the course, so they'll do it - for the grade, and with the minimum level of energy. They profit from it, of course, even with that attitude, but they don't value it or appreciate it.

Students' attitudes, fears and preferences also served as the focus for some of the beliefs of participants in this study. One belief about students' attitudes expressed by a teacher was that using the Internet in learning is "seen as [an] irrelevant 'free period' by students". In addition to this attitude, is the issue of students' particular fears and general likes and dislikes about using the Internet for learning. One teacher concluded that "Most students dislike reading screens and screens of information as much as they do pages and pages in a book". Teachers also focused on students' fears related to online learning by expressing beliefs such as: "I have found that for some students the anxiety level is raised just by mentioning that they will have to use a computer. Many are afraid they will break it" or "Students who have no access at home are sometimes intimidated by the technology hesitant to use it".

Students' level of ability as it relates to Internet and computer use also formed a subject of discussion by some participants. One teacher expressed concerns about the lack of technical ability on the part of students: "And what about the students who are not computer geniuses and the technology actually becomes more of a hinderance (sic) than a help?". Students' linguistic ability level as it relates to learning online may also present problems according to some teachers. Some teachers expressed doubts regarding students' ability to function effectively in an online environment given the language level: "Most students cannot handle the vocabulary level". Their lack of ability to learn in online environments may be of particular concern when it comes to reading: "Reading articles from 'French sites' would be far above the ability level of my students". For younger students who are working online, the level of language of the sites might determine whether or not online learning would be of any value to their learning experience: "Elementary students have limited experience in reading French. They would need very simple activities". In relation to the issue of students' ability levels in the primary grades, one teacher expressed the belief that students should possess certain prerequisite skills for Internet use: "...students would need some degree of word recognition skills which may not be developed in the primary grades".

In relation to students' ability levels is the specific issue of research skills needed for learning in OLEs. The following teacher's belief compares research done using books versus that done online. This belief also raises epistemological issues related to concerns about students' ways of knowing:

The project has helped me to understand how the students typically do research. It is titillating, but less thorough than research from the bookshelf: they understand little because their approach is not to read, but to scan for words they understand, and to look for visuals. Books are more static, and so can be held to the scrutiny of reading for meaning. Sites are more dynamic, and so invite exploration in a more erratic fashion. This latter technique is certainly the approach that most of my students find comfortable, and it is not without its attraction. It is difficult however for people who have learned otherwise to appreciate that the process has probably given rise to quite a different way of "knowing"...and leaves some of us older sceptics wondering how well things can be known which are simply scanned and not necessarily sounded. Perhaps the information

base builds cumulatively - in any case, the language acquisition doesn't proceed at a formidable pace, ...

In relation to students' approaches to online research, teachers argued that: "students depend too much on this source of information and neglect other possible sources". They concluded that students tend to value online research over other forms: "Very quickly, it has become an automatic reaction to do research using the internet before going to other sources". A problem related to doing research noted by some teachers concerns the choice of language and the dilemma of trying to promote use of French when so many of the Internet sites are in English: "It seems that when my students are surfing for specific information, they hesitate to pursue French sites. They prefer to translate from English". Sometimes however, regardless of the language "...students find that often when searching for something specific, it's just not to be found".

The relative newness of the Internet in schools may explain why some teachers expressed the belief that "students know little about moving around in internet sites, where to click, what links are" or that "students have had difficulty finding appropriate sites". The following teacher noted that her students did not have the skills necessary to search effectively in French: "I tried to get them to search in French...but more often than not, their searches turned up thousands of websites, and they couldn't understand the site descriptions enough to decide if they should look at a certain site or not". It may be teachers' perception of the ability of students to search online that led the following teacher to conclude in general that "... students need guidance when doing projects that require them to use the Internet resources".

Another belief expressed by participants in this study relates to the overall effect OLEs and computers have on students' general behaviour. Teaching in French can pose a challenge to teachers' ability to maintain students' interest and this ability can be further challenged by use of the computer: "As most are staring at the computer screen it is hard enough to get their attention in English, let alone do the 'song and dance' in French". Maintaining their attention becomes something of a competition between the "educational programs" and the computer programs: "I find the compulsive and obsessive manner of children at the computer scary. They also zoom on the games. It's difficult to get them back on the educational program (French) which are not very attractive in comparison". This attention span can shorten even further when the speed of connection is not fast: "attention span shortens with slower internet source". Although not specifically related to learning, the following teacher's beliefs express a disapproval of the effect of computers on students' behaviour: "Many students who have computers at home spend too much time 'playing computer'. They don't know how to socialize how to play when placed in a situation that requires inventing a game or finding a way to occupy themselves".

Students' reactions to and attitudes and feelings about OLEs formed the subject of beliefs in this section. Some of the beliefs about these reactions, attitudes and feelings may be further highlighted in the next section which presents the sub-category of teachers' beliefs about OLEs.

5.3.6 Online Learning Environments

This section focuses on beliefs which highlight the limitations and challenges related to use of OLEs for the teaching and learning of FSFL. Some of the participants in this study quickly dismissed the value of OLEs in the teaching of French. Others simply displayed little enthusiasm for their value. Teachers described the Internet as "merely a resource for research", "a replacement for encyclopedias", "a place to find information", "a free-for all", "just another teaching tool" which "needs to be more easily accessible and user friendly" or simply, "a resource to be used with other resources in the classroom and school." One teacher claimed that "other resources such as books are more helpful" and another that "It needs to be interactive". The portrayal of the Internet as nothing more than a "glorified encyclopedia" to support "web research" highlights the perception of the Internet as little more than books in a digital format: "Too much of what is on the Internet is simply the text in a more readily available format. Personally I can't read too much on my computer screen without getting lost or giving up. A book on the Internet is great but I'd much rather curl up in a big chair with the book in my hand and a soft light". If indeed the Internet represents nothing more than text in another format, what might be its value in the teaching and learning of French? From this teacher's perspective, its value is overrated:

How many of the FL pages on the net are actually valuable new material that can best be used by s's on line and how much of the FL material is basically books being transferred onto another medium? This seems to be happening a lot, especially on the EFL pages. If this is the case, then aren't we wasting our time on the emperor's new clothes?

In the following excerpt, a teacher compares books and earlier technologies such as cassettes with new technologies. Ease of access and of use are described as the advantages of a technology that offers information identical to that available in books but in a modified format:

Les équipements modernes n'apportent, dans leurs contenus, pas beaucoup plus que les livres et les cassettes de naguère. La forme et l'accès sont plus aisés. Au lieu de déplacer les 21 tomes de votre encyclopédie, vous manipulez un cédérom. A la place d'un manuel d'enseignement, de cassettes audio et de cassettes vidéo, vous trouvez le tout sur un autre cédérom qui vous permet, avantage suprême des liens hypertextes, de passer d'un texte à une vidéo ou à un enregistrement. Au lieu du prof, c'est la machine qui souligne les mots que vous avez mal écrits et qui vous ouvre directement la page du dictionnaire. Et plus loin que votre pauvre bibliothèque familiale, vous passez, avec Internet, les portes d'une immense bibliothèque mondiale. Vous avez tout, maintenant, et ici. Là est le progrès. Les informations sont identiques, la diffusion est modifiée.

Whereas the previous teacher believes that online information is identical to that which is available offline, another questioned the accuracy of this information: "I'm leery of the accuracy of the information on the Internet". Others describe the information as "too advanced for students" or "not always pertinent to Junior High level". Teachers also hold beliefs in relation to the quantity of information found online. One teacher described how "At times you can experience a serious 'information overload" and another complained that there is "too much info

to access". The excess of information led one teacher to conclude: "It is quite easy to become overwhelmed with the available information". The type of information is also an issue. As one individual noted: "there is a lot of garbage on the net". The quality of the information led the following teacher to affirm her belief in the need for the Internet to change: "...mais c'est l'Internet aussi qui doit changer, car il y a encore peu d'informations fiables et encore moins de sérieux dans la divulgation du savoir (je pense notamment à toutes les erreurs / horreurs en matière d'orthographe, pour le français)". For some teachers of French specifically, there is the issue of the language of online information. Teachers observed that "much of the information is in English" that, "there are fewer French sites than English ones" and that "sites must be translated".

In terms of the issue of online information, others may focus less on its characteristics and more on what students and teachers do with this information: "The Internet provides information but it does not teach a student how to use this information". One teacher described how the challenge she faces lies in teaching students to critically evaluate the information they find online: "...j'ai trouve que la principale difficulté était de devoir prendre le temps d'éduquer les élèves à ne pas prendre pour argent comptant tout ce qu'ils trouvent sur l'Internet et à questionner leurs sources, autrement dit, à faire un travail de journaliste ou d'historien". Another teacher explains how providing students with information is only part of a much larger process:

Information can be shared on the Web, but knowledge can't. One must "make" one's own knowledge by processing the information presented, in other words, by making sense of it oneself. This is why giving students information by presenting them the answer is not giving them knowledge. Students must be coached to develop some higher-order thinking skills to process information and to create knowledge of their own.

Another characteristic of the information which may present problems for teachers is the fact that it is constantly increasing: "The capacity (sic) of computers doubles every 18 months. If you think about it 2x2 is only 4 isn't too bad but when you start doubling 1024 it becomes rather unyielding. With the amount of Information available, increasing daily, we as teachers are finding ourselves overwhelmed". Not only is it increasing, but it is also changing:

Like many have said the hard part is staying on top of the technology. Last week I had found about 6 addresses for my students to find information about castles. The next day when we went into the Lab, one of the addresses had changed. This is a medium that will be ever changing. You cannot write a lesson plan and use it for the next 10 years. You'll be lucky if the information stays the same or in the same spot for over a month.

Accessing the information efficiently is important to teachers. One teacher noted: "I dislike the time one often wastes in trying to find certain information" and another "accessing small tidbits of information may take hours". The skill required to access information is another issue of importance for some teachers who may become overwhelmed when trying to conduct searches:

I am a reluctant participant of Internet use. From my personal experiences, I found it rather like being able to browse thousands of magazines at once. It can be overwhelming although interesting. I have sought found some pertinent information for my courses in the past but I always fell (sic) that it has more to do with luck than with any particular skill or expertise.

Efforts to access information effectively can be hindered by problems with navigation and may explain why certain teachers tend to use the Internet less than they might otherwise: "If I could use the internet without having to search forever to find sites i (sic) think i (sic) would use it more." This teacher attributes her difficulty with searching to her own lack of patience: "I find it difficult to find what I am searching for but that is because I don't always have the patience to sit and refine my search. I expect instant answers." Refining one's search may be necessary to avoid difficulties such as this teacher has experienced: "I find it extremely difficult to narrow down the choices supplied by the browser ex 50,000 articles concerning the topic being searched." Sorting through the information and deciding what is useful or pertinent can also present challenges: "Often you have to wade through so much junk before you hit a relevant item. It's so easy to become distracted bu (sic) other items of interest you may come across".

Problems with navigation led one teacher to note that "the internet is very frustrating". Others noted: "sometimes I get frustrated if i (sic) don't find what I need" or "I get bogged down and find it frustrating to find nothing after many tries". Links from one site to another may prove disorienting and thus frustrating for some: "I have found that many sites (in any type of research) send the searcher on useless tangents and thus much time is often wasted, and it may become very frustrating". The amount of information supplied as a result of some searches presents challenges to this teacher: "I sometimes find the amount of sites you hit after a search can be very overwhelming and time consuming". A similar challenge was expressed in this comment: "Sometimes it is very difficult to find a narrow enough route to the information needed".

Another aspect of the information which presents challenges is its reading level and the "difficulty of the language". One teacher commented that "The French is often above my students' heads." and another that "sites tend to be so difficult for weaker French students." The following teacher questions the linguistic and pedagogical value of online material in French: "Since the Internet would require reading and some type of response to the reading, I would think that French Internet sites would not be suitable for my students' curricular needs". The reading level in particular and the content level in general may present concerns for some teachers especially in cases where children are young: "I am weary about finding sites that would be useful for primary core French". Use of graphics in sites may provide a solution to problems with reading levels: "It would seem most beneficial if sites used graphics rather than text since the reading level of primary students is quite low in French and their ability to decode unknown/known words has not yet been developed".

Problems encountered by teachers in their use of OLEs may lead some to conclude that they are designed moreso for a particular type of student: "My perception of the Internet is that it's great for children who already know how to read well, classify information, and who have a purpose

for use." In the excerpt that follows, a primary teacher describes her beliefs about the value of the Internet for young school children and explains how she adapts sites to suit her students' needs:

I am a third grade French immersion teacher. I have found that very few French sites are kid friendly, so I always make up some kind of activity sheet to accompany the web site. For example, there's a Canadian site that includes an interactive game called "Les Mineraux et les Metaux: Un tresor a couvrir." By clicking on everyday objects around the house, you get a whole list of the minerals and metals that are found in them. My kids can't read all those names of minerals - plus they don't know what they are - so I made it into a simple treasure hunt. First they have to predict where they would find gold and silver in their house, then they go to the web site and click on the pictures. Within the list of metals, they only have to recognize "or" and "argent." They fill out the activity sheet, we compare predictions and results and in the meantime we have reviewed lots of everyday vocabulary. There are hundreds of kid sites in English, but even if you're lucky to find them in French, they are written for francophone kids and the reading level is usually still quite difficult. So it does take me a lot more time to find appropriate sites and to write up an accompanying activity sheet.

The emphasis on reading is an issue from the perspective of the level of difficulty it may present for some students. However, it is also an issue for this teacher who argues that the Internet's value for learning does not go beyond its ability to provide reading selections:

But dealing specifically with the Internet. Are we just using it as another source of realia? An authentic (sic) reading selection that the student is to glean information from? I believe there is a greater potential for interaction, however I have not been able to find an educational site that goes beyond the grammar exercises. The computer people don't know how to make something educational and the education people don't know how to computerize (Is that a word?) the education.

The emphasis on reading presents a further concern as explained by this teacher of Core French: "The Internet would have no real value to the teaching of core French since it would not facilitate learning in speaking and listening". The Internet's capacity to develop oral skills, particularly that of listening, is described by the following teacher as being completely lacking on the Internet: "A major problem - at least for my pupils - is listening comprehension. This important aspect is unfortunately (sic) completely neglected in the net - at least we have no sound cards in our machines, and I have no idea whether French spoken language is available at all". The belief that the Internet primarily favours text-based learning is an important one given the need to develop listening and speaking skills in language learning: "Oral skills take a back seat to reading. Maybe some day, speaking and listening will be as integral to web sites as text and graphics. When that day comes, the Internet will truly be the language learner's dream".

The pedagogical value of OLEs for learning second languages may be questioned, not only because of the emphasis on reading, but because of perceived limitations of the technology itself:

Mais les équipements ne peuvent parvenir à comprendre l'interlangue d'un apprenant, à comprendre ses erreurs, à le suivre dans son cheminement cognitif, à lui proposer une réponse adaptée à son apprentissage individuel. Les équipements n'apportent pas beaucoup non plus aux principes fondateurs d'approches telles que la suggestopédie, la "total physical response", ou "l'approche naturelle". J'aurais donc tendance à considérer les machines d'aujourd'hui au même titre que les machines d'hier.

The belief described in the following excerpt also compares today's machines with those of the past. In this case, the emphasis is on the technology's didactic control:

Ce qui me paraît le plus gênant est que l'on retrouve parfois dans la machine une attitude relevant de l'enseignement traditionnel: la machine détentrice d'un certain savoir comme le maître autrefois, elle ne propose qu'une vérité que l'apprenant ne peut contester, elle présente souvent une seule approche cognitive de la langue, mais surtout, elle ne permet pas à l'apprenant de s'exprimer. Le problème n'est pas nouveau: l'autodidaxie pratiquée avec un livre et des bandes magnétiques rencontrait il y a 30 ans les mêmes difficultés. Les problèmes des machines d'aujourd'hui sont les mêmes que ceux des machines d'hier. Les équipements d'aujourd'hui ont beaucoup de limites semblables aux équipements d'hier.

In the previous excerpt, the teacher described the technology's tendency to dominate the learning process. In this excerpt, another individual argues that it is the teacher who decides on the approach taken by the machine and it is the teacher who can easily use the technology to simply digitize existing classroom practices:

...-la traduction: pas de problème, allez lire les infos dans www.unjournal.fr et traduisez le premier article pour demain; - de la grammaire: pas de problème, allez chercher le texte dans www.texteaupresent.fr et écrivez-le au passé; ou allez chercher la recette du "gratin de courgettes" dans www.lesbonnesrecettesdelamèreMarie.fr et donnez-moi les infinitifs de tous les verbes; - du vocabulaire: pas de problème, allez dans www.lanature.fr et faites-moi la liste de tous les animaux et de toutes les plantes présents sur le site. - de la compréhension orale (est-ce que cela entre dans le "traditionnel" ?): allez écouter les infos sur www.laradio.fr et complétez la transcription suivante... (toutes ces URL sont fictives, bien sûr,... enfin, je pense !) En un mot, on remplace le document papier ou la cassette par un document informatique.

Added to these beliefs about the limitations of the new online technologies, are others which question the value of OLEs for learning. As one teacher explained: "Yes, it does look great to have all these means as helpers in the classroom - but do they really bring that much gain to our teaching output?? As you can see I am rather sceptical, I am afraid that the net is an underestimated time eater and an overrated motivator". Another commented that she disliked "the commercial aspect-the gimmicks for selling and all of the advertising" while another complained that "The Internet does not develop interaction between students. Students in front of a computer screen look like automatons".

In a previous section of this chapter, one teacher described her positive teaching experience with this technology. In the excerpt that follows, another teacher provides a different perspective on

chat rooms and their use in the second-language classroom: "I did go to a few Quebec Chat rooms with my gr 12's and they had a ball! They spoke to actual Quebecers and were very conscientious (sic) about how they typed words, and phrased their dialogue. However, the content was superficial and it really served little purpose except to give me extra grey hair!" Another online tool which can be used for language learning is the dictionary. The following teacher's experience and her beliefs about these dictionaries suggest that there is little value in the tool for language learning: "I have tried any number of on-line dictionaries. Even fairly common words (e.g., blackbird, careful, fireplace) are often not included (sic) in the data base, and forget anything out of the ordinary. As for babelfish and others like it, it is a literal translation tool that serves only to amuse, not to educate".

5.3.7 Summary

The challenges described by teachers are numerous and relate to many different aspects of the learning process. The following table provides a summary of these different beliefs in the same way that the summary was presented of the advantages to use of OLEs.

Table 5.3 Summary of beliefs related to the challenges to use of OLEs

Time the curriculum	Training, support vision	Access equipment	Control monitoring	Students	OLEs
Internet is time-consuming a time waster	Teacher training programs did not include Internet training	No access at home time-consuming to prepare lessons after school	No control over vocabulary or complexity of grammar	Students don't want to change or get used to a new idea	Internet is merely a resource for research
Internet use requires advance preparation but preparation time is limited or unavailable	Technology in schools is outdated but teachers are trained on new technology	Can't use one's own personal account for Internet projects	Some students are adept at using Internet go into areas where they should not	Some students resist a non-traditional type of teaching approach	Need to find time to educate students to not take for granted online info.
No time to get on Internet	Unwilling to do training outside of work hours	Internet access is slow and difficult in certain regions	Some students access inappropriate sites	Students see Internet as free period	Internet is a free for all

The Internet seems like something extra to be taught	Need instruction on project-based learning	All labs are busy computer lab is too widely used	Some students are computer-savy can bypass filters	Most students cannot handle the vocabulary level	Internet needs to be more interactive
Surfing aimlessly is time-consuming	Teachers feel intimidated by lack of knowledge	Computers are outdated	Difficult to keep students on track	Students know little about moving around in sites	Internet is just another teaching tool
Too many demands on teacher to find time to devote to Internet use	Need skills to fix things, to find information, to use it efficiently	To conduct an Internet project, a computer lab and set time is needed	Difficult to let students wander put up boundaries supervise	Students' attention span shortens with a slower Internet connection	Internet needs to be more accessible user friendly
Time is consumed by translating sites and posting student work	Teachers' mentalities cannot be changed quickly	Phone lines may be antiquated and long distance call is a disadvantage	Adult level of most sites requires guidelines and consequences	Compulsive obsessive manner of children at the computer is scary	Other resources such as books are more helpful
Objectives must be covered by June but projects take a long time to complete	Teachers are helpless when attacking new things such as Internet	Would prefer students to work on individual computers	More important to teach students potential dangers of Internet	For students who are not computer geniuses, technology is a hindrance	Can easily be used to simply digitize traditional practices
Time is consumed by waiting for information to be downloaded	Rapid pace of change in technology makes teacher learning outdated quickly	Working independently on the computer is not an option for many younger children	Can make sure site is not too difficult by reading through it in advance of student use	Students spend too much time playing computer therefore don't know how to play or socialize	Very few French sites are kid friendly are written for Francophones

Preparation time is increased as technology becomes more sophisticated	Do not feel comfortable enough or have skills to use the Internet with students	Using Internet is difficult when only access to computers is in resource centre	Teachers must guide students to sites they have chosen and continue to monitor	For some students, exploratory learning is something done under duress not because they appreciate it	Too much of what is on Internet is simply text in more available format
No time available to become comfortable using the technology	Need inservice on how to integrate it into the curriculum	Not enough computers in working order	We do not have the resources to check on every computer	Students depend too much on online sources of information	Leery of accuracy of online information
Use of Internet with young children is not using instructional time wisely	Lack of information available on suitable online activities	Need one computer per child	Students have online access at home where teachers have no control	Reading articles from French sites would be above the ability level of some students	The net is an underestimated time eater and an overrated motivator
Planning is necessary to avoid eating up valuable time	If I cannot do it myself I cannot do it with students	With only 4 computers for 25 students, it's a waste of time trying to access Internet	Preplanning previewing sites avoids overwhelming students with text	Students without home access are intimidated by technology are hesitant to use it	Internet is a glorified encyclopedia or replacement for encyclopedias
Use of Internet activity must be done at expense of something else	Limited troubleshooting computer literacy discourages use	All sorts of things go wrong with computers	Previewing sites preplanning is a must on the Internet	Some students are not used to teacher being in the role of a facilitator	There is too much information to access
Finding appropriate sites takes forever	Want to know which sites fit with prescribed curriculum	Computer lab is practically full with computer science courses	Students can't stay on-task if allowed to randomly browse	Students' approach to online research leads to a different way of knowing	Information is too advanced for students

Lack of time-management skills motivation on part of teachers	More more equipment added each year but no added time to learn how to use it	The network is a problem because it crashes	Students can lose computer privileges sit at their desk if they abuse time in lab	Students cannot understand site descriptions as presented by search engines	There are fewer French sites than English ones sites must be translated
Lack of instructional time to complete prescribed curriculum	Want to know what sites to access, which are appropriate what objectives are of using sites	Using Internet is difficult without computer lab in the elementary school	Students will surf if there is downtime so period must be well planned	Elementary students have limited experience reading French need simple activities	Modern equipment offers same as books cassettes in modified format
Extensive time is required to plan effective use of Internet	Preparation programs did not include training in French computer terminology	Language classes are low on priority pole - business, math tech ed are first	Keeping students on task while online in lab requires a lot of preparation	Students find that when searching for something, it is not to be found	Content of chat conversation is superficial
No free time at school family personal life take up time at home	Need a reason to go online-not aware of its value in improving learning	Could have a lesson planned Internet is down for whole period	Preplanning and an objective that can be evaluated are needed for Internet use	Use of OLEs requires word recognition skills which may not be developed in the primary grades	Internet must change- little trustworthy information too many spelling mistakes
May not be relevant to curriculum	Trainers know technology but not new pedagogies	Frustrating for students when computer freezes	Chat rooms don't allow control of topics	Students need guidance with online searching	There is a lot of garbage on the net

Too much other curriculum to cover-traditional curriculum takes precedence	Don't know how to incorporate it into teaching Difficulty coming up with ideas	We have to accept that students will gain access from at home or in the library	Students are inventive will try things that teacher would likely not find	Some students prefer to surf for information in English then to translate	It is easy to become overwhelmed by the amount of information
Not interested in computers technology therefore not willing to devote time to it	Too much emphasis in training on technical and not pedagogical aspects	Half the time, computers are not up running- one hassle after another	Must preview sites to find child-level language or students will translate English sites	Need to convince students that they need to change - some students still long for a traditional approach	The medium is always changing therefore it is hard to stay on top of the technology
Do not see benefit coming from it	Training must first emphasize technical aspects secondly pedagogical aspects	Unreliability of equipment is difficult because it is a factor out of teacher's control	There is a lot of information on the net therefore teacher needs to guide students closely with assignments	Hard to get students' attention on educational programs which are not attractive in comparison to computer games	Reading level is problem particularly for those in primary- better sites use graphics rather than text
Need to avoid jumping on computer bandwagon	Lack of support from administrators	Connections are slow and lines are overloaded	Would not have students do a general search without guidance	Use of computer makes some students anxious.	A replacement for encyclopedias
Curriculum activities lessons not conducive to Internet use	Internet is like a huge resource centre no time is available find anything	You are at the mercy of the server the time of the day	Most difficult part is control -wonderful to let students discover but how do you grade that?	If students have not learned basic investigative skills needed to explore Internet, they will not learn them through SLL	Internet use is like trying to browse thousands of magazines at once

No need to use Internet because it is important to vary teaching methods	A lot of teachers parents are comfortable with status quo	High costs means Internet use is not worth it for most teachers	Teachers have duty to ensure that students don't access inappropriate sites	As students are staring into computer it is hard to get their attention in French	Information can be shared online but knowledge cannot.
Need to ensure that students are benefitting from the technology	Too many changes necessary challenges to use Internet as primary teaching resource	Limiting factor is computer lab time reliability of equipment	—	Students' way of doing online research is less thorough than research done from books	Information is not always pertinent to the junior high level
Extra demands on teacher to provide linguistic support needed for navigation	It's a myth that all training knowledge problems will be solved thanks to Internet	Morning classes bring up online information faster than afternoon classes	—	Students' approach to online research is to scan for words they know look for visuals and not to read	Searching effectively efficiently is difficult- sites send searcher on useless tangents
Takes time to keep up with technological changes	In-service in Internet technology is not provided	It is often up to teacher to find sites resources, download them to paper, develop class activities, save student products then upload them	—	Students' automatic reaction is to research online before going to other sources	The Internet is just another source of realia

Time is used screening resources to ensure communication is in French	Technology can sometimes be difficult to assimilate, requires repetition practice by teachers	Webwhacking programs can be used to simulate navigation of a site	–	Trying to master language skills while exploring the Internet may frustrate students who learn deductively	Computer people can't make something educational educators don't know how to computerize material
Teaching French and using Internet is complicated	Internet technologies non-existent when most teachers were trained	–	–	–	Often you have to wade through a lot of junk to find information
Students waste time by browsing the web in other areas	Without staff development, teachers will continue to teach in old ways	–	–	–	Online dictionaries serve more to amuse than to educate
The time needed to plan effective Internet lesson is daunting	Little support from colleagues	–	–	–	The Internet is a resource to be used with other resources
Projects can eat up valuable time if there is not a commitment to plan, find sites assess effectiveness	Tend to fall back on way teacher learned best which did not include Internet	–	–	–	Internet provides information but does not teach students how to use it
As long as teachers play by antiquated rules of educational system, new technologies will always remain new	Technological illusion results from seeing technology as an end in itself de-emphasizing pedagogical needs	–	–	–	The Internet has no value for teaching of Core French as it does not facilitate learning in speaking listening

Need appropriate sites to ensure objectives are achieved to make maximum use of time	Other teachers do not share enthusiasm for use of OLEs- they think technology is a passing fad	–	–	–	Internet is great for children who know how to read well, classify info. have a purpose for its use
Educational system works against valuable but time-eating projects	Vision is too technological -not enough emphasis on new uses new paradigms	–	–	–	At times, you can experience a serious information overload
Would like to use Internet but don't have time	Many adults are petrified of technology	–	–	–	This is a medium that is ever changing
Time-management is number one skill to master	Focus of teacher development should be on tapping into excitement without a lot of pressure	–	–	–	Today's machines have computer as master attitude do not adapt to individual needs of students
Teachers need commitment to look outside the box	Need training to transform what is on Internet into a didactic tool or material	–	–	–	Machines present only one cognitive approach to the language
The Internet should not be used as a sole resource	Don't know how to use technology on day-to-day basis	–	–	–	The machine does not allow students to express themselves
Primary F.I. program is already 'surchargé'	Need follow-up to training on on-going basis	–	–	–	The hard part is staying on top of the technology

The Internet needs to be used with specific goals and frequent evaluation	A minimal mastery of the tool is necessary before consideration of pedagogical questions	–	–	–	Students must be coached to develop higher-order thinking skills to process information
–	Teachers are stressed tired and just want to get through their curricula	–	–	–	Finding online information has more to do with luck than with skill or expertise
–	Teachers have not apprehended the new pedagogical paradigms	–	–	–	Sites tend to be difficult for weaker French students
–	There is a lack of information available about suitable online activities or uses	–	–	–	The number of sites you hit after a search can be overwhelming and time-consuming
–	More teachers would be apt to use technology with more support training	–	–	–	It is easy to become distracted while searching online
–	Colleagues are convinced that teacher must be only source of input of knowledge	–	–	–	When speaking listening are integral parts, the Internet will be a language learner's dream

–	There is distrust of students' ability to learn on their own - they must be led to knowledge	–	–	–	Machines cannot understand students' errors, follow student's cognitive path or propose an individualized response
–	Each time a new technology is introduced in the language class, the same messianic discourses come back	–	–	–	–
–	All that is being done at present is through individual's teacher's initiative	–	–	–	–

5.4 Conclusion

The aim of this study is to profile the beliefs of teachers of FSFL about teaching and learning in online learning environments. This chapter has presented these beliefs following a preliminary analysis and coding. What the analysis revealed is that teachers' beliefs are heterogeneous, they are spread over a wide range and cover a broad selection of topics and aspects of school life. Two categories and twelve sub-categories grouped approximately 400 beliefs. The categories derived from the coding are not definitive. They could have been organized somewhat differently and some of the beliefs might have been grouped in multiple categories or in other categories. However, what is important in the grouping of the beliefs is that some commonalities could be identified and that boundaries could be established to allow for inclusion of all the data.

Some of these beliefs reflect an enthusiasm for use of OLEs and highlight their advantages for teaching and learning FSFL. Others focus on the many challenges to teaching and learning with OLEs. The beliefs covered many different aspects of the teaching world such as teachers, students, technology, the curriculum, time, text-books, information, teaching approaches, communication, training, equipment, motivation, control and roles to mention but some of the

beliefs uncovered by this study. In relation to beliefs about the teaching of FSFL, teachers referred to many aspects such as listening, speaking, reading, writing and culture. In terms of the tools of OLEs, teachers referred to chat rooms, e-mail, the World Wide Web, MOOs, and discussion lists. In relation to beliefs about the types of activities in which students can engage in online, there were references to virtual visits, web-publishing, e-mail correspondence, online research, and collaborative projects. In terms of approaches, teachers made reference to project-based learning, task-based learning, Communicative Language Teaching and resource-based learning.

There were some aspects related to teaching and learning which were not represented by teachers' beliefs. While there were references to administrators and many to students and to teachers, there were few if any beliefs related to parents. Beliefs about testing and evaluation were few although there were many beliefs related to covering the curriculum. While there was minimal reference in the beliefs to the use of OLEs in the teaching of content areas like history, there was no reference to use of these environments for the teaching of other subject areas in French such as science or math even though these subjects figure as part of the French-Immersion curriculum in Canada.

There were other aspects of the beliefs which were not addressed by this chapter. The profile revealed that there were many differences and even contradiction and conflicts evident in the beliefs. The profile also revealed that while some teachers are enthusiastic about use of OLEs for the teaching of FSFL, others are more cautious and some are evidently opposed to their use. How can we explain these differences? How can we explain the contradictions and the conflicts? The purpose of the next chapter is to interpret the beliefs, to attribute a larger meaning in terms of educational theories and paradigms. Chapter 6 takes the analysis one step further in order to provide an interpretation of the beliefs in each category. The analysis focuses on patterns and similarities in types of beliefs in order to understand what the beliefs reflect in terms of the approaches, philosophies and trends which have characterized language teaching during the past 100 years.