

## ***AccèsSimple* Web site: From innovation to evaluation**

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### **Abstract**

Cities and large public organizations use Web sites to keep citizens informed. But those with intellectual disabilities, along with a large portion of the population, have reading difficulties. In order to ensure that all these citizens have access to information, in 2005, the Ville de Montréal launched a special section of its Web site that provided three separate accommodation tools: 1. simplified text, 2. alternative spelling, and 3. acoustic version. Several months later, we conducted a survey of this modified section of the Web site by interviewing and observing users with intellectual disabilities and their families. We also analyzed the e-mails that hundreds of citizens sent to the City in reaction to this section of the Web site. This survey enabled us to recommend improvements to the site.

### **1. Introduction**

On April 5, 2005, the Ville de Montréal launched *AccèsSimple*, a modified section of its Web site designed to better meet the information requirements of citizens with intellectual or reading difficulties (Rocque and Langevin, 2006). This innovation is the result of a partnership between the Ville de Montréal, the Comité régional des associations pour la déficience intellectuelle (CRADI) and Groupe DÉFI Apprentissage, a research team from Université de Montréal's education faculty which specializes in the education of those with intellectual disabilities. Additional partners also assisted in the development of *AccèsSimple*, including the Association québécoise des personnes aphasiques, the Regroupement pour la

Trisomie 21 and the Mouvement Personne d'Abord de Montréal.

### **2. Background**

*AccèsSimple* was born of a review of literature on universal accessibility (Rocque and Langevin, 2005) conducted by Groupe DÉFI Apprentissage, in collaboration with CRADI and the Ville de Montréal. The results of this exercise demonstrated that accessibility is of major concern to many countries, states, municipalities, institutions or groups (Government of Québec, 2004). For this reason, many would say that universal accessibility has become a reality. Access to buildings, elevators and Braille in public locations clearly point to accessibility as being a principle that has been put into practice (Preiser and Ostroff, 2001). However, a review of the literature demonstrated that, this initial impression notwithstanding, there is still a lot to be done, notably in terms of providing those with intellectual disabilities access to written information. In fact, for those with intellectual disabilities, universal accessibility tends to be more in the order of good intention than actual fact. These individuals are, and to a large degree, the group least well served in terms of accommodation measures (UN, 1995). We wish to point out that, as regards accessibility to written information, those with intellectual disabilities are not the only ones experiencing problems. It is estimated that 30% of residents of large cities like Montréal have difficulty reading, for any number of reasons (cognitive limitations, problems with language and words, illiteracy, mother tongue other than French, etc.). It goes without saying that accommodation tools must be made available in order to ensure accessibility to written information. The review of literature revealed a

number of accommodation options, the most promising of which, *Le Savoir-Simplifier*, is promoted by the Association Européenne ILSMH. However, major public organizations have yet to buy into this method, which is designed to provide information in clear language for those with intellectual disabilities.

### **3. AccèsSimple in brief**

The *AccèsSimple* Web site is a tangible demonstration of the Ville de Montréal's commitment to universal accessibility, designed to ensure that those with disabilities or limitations of a visual, auditory, intellectual or other nature are able to take part in community activities, and use products and services autonomously.

As such, *AccèsSimple* is specifically designed to provide those with intellectual or reading disabilities with easier access to information about municipal affairs. To that end, *AccèsSimple* provides three methods for accessing the information, namely simplified text, alternative spelling and the acoustic version.

#### **3.1 Simplified text**

The simplified text option is designed for those who, for whatever reason, have serious reading or language problems. Simplified text provides condensed information that is easy to read and understand based on the European model described in the *Le Savoir-Simplifier* guide produced by ILSMH. The texts are presented in conventional French-language vocabulary, but the content is limited to essential information and presented in short, simple sentences.

#### **3.2 Ortograf altêrnativ (alternative spelling)**

The alternative spelling version is designed to serve a segment of the population that, until now, has been clearly marginalized in terms of universal accessibility, namely those with intellectual disabilities (Langevin and Rocque, 2007). Alternative spelling applies an alternative method of written communications created by Groupe DÉFI Apprentissage researchers, in order to alleviate illiteracy problems in those with major intellectual disabilities. In addition to simplifying the text, alternative spelling also reduces the complexity of the writing. This alternative method for accessing written communications is based on stable orthographic correspondence between the letters (graphemes) and their sounds (phonemes), based on the archigraphèmes proposed by Catach (1998). Alternative spelling uses only 34 grapheme/phoneme correspondences, whereas conventional vocabulary uses over 4000. Alternative

spelling is not intended to reform standard French language vocabulary. It is designed to act as an alternative writing system similar to Braille, to be used by those who would otherwise have no access to written information.

#### **3.3 Acoustic version**

Lastly, the acoustic version, which serves to support the two previous versions, allows the user to listen to a recorded text.

### **4. A controversial initiative**

Several public figures commented in the media following the spring 2005 launch of *AccèsSimple*, and their comments produced a strong public reaction, in the form of e-mail messages to the Ville de Montréal. Between April 6 and May 14, 2005, the City received 378 e-mails, and between May 15 and September 6, a period almost three times longer, only 7 e-mails were received. This flurry of e-mails sent at the time of the launch is also mirrored by site visits. In April and May 2005, the number of visitors stood at 54,520, while during a period twice as long, from June to September, there was only a third as many visitors, or 16,452. During its launch, *AccèsSimple* attracted considerable attention and got people talking. Now, however, the site is being used for its intended purpose: to help the intellectually disabled and their families find information they need.

### **5. Evaluation of AccèsSimple**

Prior to the launch of *AccèsSimple*, the partners involved made plans for a site evaluation after a few months in operation. To that end, an evaluative survey was conducted in December 2005, based on qualitative interviews with target groups (individuals with intellectual or reading disabilities, and their families), designed to determine their level of satisfaction with the site. Concurrent with this information gathering, e-mails addressed to the Ville de Montréal were analyzed.

#### **5.1 Objectives**

The main objectives of this evaluative survey were to:

- 1- evaluate the degree to which the modified section met the needs of targeted users;
- 2- analyze the e-mails received following the launch of the adapted site;
- 3- recommend improvements to the site.

## 5.2 Methodology

During Phase I of the survey of the AccèsSimple target group, nine people, four women and five men, were interviewed individually for an hour. In view of the subject matter presented on the Web site, the survey participants were all adults, with the exception of a 14-year-old girl. Five of the participants had slight intellectual disabilities (an IQ between 55 and 70), and one person was considered to have moderate disabilities (IQ between 40 and 55). Two participants had no intellectual disabilities: one was the computer

Regarding the alternative vocabulary, five participants had no knowledge of this vocabulary. Two participants had had previous exposure to it, but had not adapted to it, and two participants had adapted to it and were able to read it. These two participants were the young lady with moderate intellectual disabilities and her mother.

The following four steps are part of our descriptive analysis of the data:

1- Organization of data collected

a) Transcription of the entire contents of the interviews (verbatim)

b) Processing and condensing the transcriptions:

- Each transcription is coded, indicating the gender of the participant and the interview number. This coding is written in the text margin, next to each group of words, phrase or group of phrases (units of meaning) on a specific subject. In addition, each subject that emerges from the units of meaning is summarized in a meaningful formulation, which is also written in the margin.
- Relevant segments (units of meaning) are then grouped and included in a separate document according to the subject matter discussed. These documents are then divided into emerging sub-themes. The pre-coding enables us to determine the number of participants sharing a perception and to pinpoint their profile.
- A grouping that contains only a single unit of meaning on a specific subject may, however, be of the utmost importance, given the fact that the participant is able to verbalize a decisive element that serves to highlight the comments of the other participants.

2- Descriptive-summary of organized data

A descriptive summary is written for each subject grouping and sub-grouping, which reflects the collected comments as accurately as possible. Then, for each grouping, the most meaningful units of meaning are pinpointed.

3- Results analysis

The descriptive summary comments are revised, improved and written up in a straightforward style,

facilitator for a community organization patronized by several of the participants, and the mother of the 14-year-old girl with moderate disabilities.

In terms of the ability to read conventional vocabulary, five participants had no problems; three had slight intellectual disabilities, and the two others had no intellectual disabilities. However, two of the participants had difficulty reading conventional vocabulary (slight disability) and two others were unable to read common vocabulary.

indicating the results to be integrated into the report. This enables us to determine the meaning of the collected data, assemble the most pertinent information, agree on an explanation of the subject in question and determine the common meaning that emerges from the data analysis.

4- Recommendations

Analysis enables us to make recommendations regarding elements of the Web site to be preserved or improved.

With regard to Phase II the study, similar to the data collected in individual interviews, comments received in the 378 e-mails were submitted to descriptive analysis, following the four previously described steps. Needless to say, transcription was not required, and pre-coding corresponded solely to the order in which the e-mail messages were read. The additional steps were followed in order to identify emerging subjects in terms of whether they reflected favourable or unfavourable opinions of the AccèsSimple Web site.

## 5.3 Results

The positive comments of the individuals involved helped us ascertain the pertinence and informative value of the Ville de Montréal's AccèsSimple Web site and to confirm the importance of a resource of this kind to the target groups. By offering three separate versions (simplified text / alternative spelling / acoustic version), AccèsSimple clearly fulfils its primary mission: to meet the specific needs of groups of citizens that, lacking tools of this kind, have little or no access to written information.

The interviews we conducted enabled us to identify elements of the site to be retained and those that required improvement, in order to better meet the needs of the target groups. We determined that the following elements should be retained: the aptness of the site's name (which prompted one participant to comment, "It's so simple!"); the effectiveness of simplified text, which facilitates reading; the acoustic version, which provides the site with real added value

(it facilitates reading and provides dynamic content); the light background screen; consistent visual presentation from one page to the next; photos; and the ergonomic interface as a whole.

However, other elements need to be improved and will mark Phase II of site development: add an option that allows users to increase the font size; revise the amount of information under each heading; ensure consistency of text structure from one heading to the next; review selection of pictograms and icons; enlarge photo size and improve definition; speed up availability of acoustic version; add a “Back” button at the bottom of the page; revise the wording of the AccèsSimple Caution/Explanatory notes (Why this site?), in order to better explain the purpose of this site to the public.

Regarding the e-mails received and submitted for analysis: 13% were favourable to AccèsSimple. They were sent by citizens from the target groups or those who are aware of their needs. In their view, AccèsSimple promotes the social integration and autonomy of the most disadvantaged, respects the principles of equal opportunity, grants the right of access to information and testifies to the openness the Ville de Montréal displays to all of its citizens. However, 78% of the e-mail messages were unfavourable to AccèsSimple. These opinions were exclusively with regard to alternative spelling and tended to reflect a basic lack of understanding of the objectives of this spelling, and the target group and its needs. In fact, alternative spelling is viewed as a massacre of the French language, not as an accommodation measure. In addition, there is clearly confusion about the group targeted by this spelling, which is associated vaguely with those who have major intellectual or reading disabilities. The AccèsSimple target groups are also viewed as threatening and disturbing. As such, the e-mails often make negative comments about those with intellectual or reading disabilities, and frequently demonstrate a lack of understanding of the difficulties these people face in their day-to-day lives.

The e-mail comments received since last October a few months after the media reaction demonstrated major support for AccèsSimple, which is clearly viewed as a tool to promote social inclusion and openness to the world.

## 6. An initiative to be promoted

Over the next few months, AccèsSimple will be consolidated, which will make it possible to promote its innovative nature. Changes made to the site will be on the basis of recommendations that resulted from the evaluation.

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