Using the Varieties of French CD-ROM: The Student's Perspective

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Varieties of French CD-ROM background

The Varieties of French programme is a federally funded (CAUT/CUTSD) project undertaken jointly by Monash University and the University of Melbourne, which is now in its second of a three-year development. It is a multimedia-enhanced course in French sociolinguistics for advanced (second/third year) level students. The heart of the system is a CD-ROM multimedia database containing a large range of material related to the course syllabus as well as a number of interactive tutorial exercises (see Appendix 1 for further details). We began evaluating the classroom usage of the program in 1997 when the course was taught at Monash and Melbourne (Burston & Monville-Burston, 1997). Our focus at that time was upon the interaction between the instructor and the programme. In the study reported here, which is based upon the usage of the programme at Monash University during the first semester of 1998, we turn our attention to our students and their reactions to the Varieties of French CD-ROM.

Monash University study

Our data is based upon individual oral interviews (at mid-term) and an end of course written questionnaire, which were completed by all members of the class (N=14). In addition to observing the use of CD-ROM materials by the instructor during lectures and tutorials, all students had their copy which could be used either in the Language Centre computer laboratory or at home. The questions which formed the basis of the interviews and the relevant ones from the end of the term questionnaire are presented in Appendix 2 (A-C). The interviews centred upon two main issues: firstly, how students regarded the classroom usage of the CD-ROM; and secondly, how they used the CD-ROM outside of class.

Evaluation 1: In-class usage

Lecture presentation summaries

In class, the Varieties of French CD-ROM provides essential support for lecture presentations in the form of Powerpoint-like summaries. These incorporate maps, graphics, sound files and video clips.

Analysis of student responses

Q1. To what extent did the use of computer-based multimedia resources facilitate your understanding of the lectures?

With one exception, students reported that the biggest advantages of the in-class usage of the CD-ROM (and their greatest source of satisfaction) were:

a) the help it gave in following the lectures, which were all given in French —the course adopts a focus on the content approach to SLA. Seeing the main points projected on-screen facilitated note taking and checking. Often quoted were:

- clarity (headings and subheadings giving the outline of the lecture; enhancement of key points)
- association of the oral language (lecturer speaking) and the written language (projected screens) helping comprehension of the new words and new linguistic concepts being introduced.

b) the multimedia support full colour dialect/language/historic maps, reproductions of historical documents, audio and video examples.

c) the flexibility of this support.

d) the motivating effects of a), b) and c).

Two students (S2 and S3) commented however that the lecture presentations on the CD-ROM are no more than a list of headings with illustrations, and that little detailed information is provided: they added that they would like to have the entire lectures on screen for reviewing at home. Presently, the CD-ROM is conceived by its authors as an enhancement to traditional teaching delivery. We are working however on a new version which will come with a companion textbook. One student <S1> was negative towards projecting lecture outlines on-screen and using multimedia documents.

Although most research (Meskill, 1996), suggests that comprehension is aided by the conjunction of aural/visual processing if the verbal and visual elements are congruent, some students may experience (especially in a non-native language) perceptual/cognitive overload and feel that information in ready-made multimedia lectures escapes them (Burston & Monville-Burston, 1996; (Monville)-Burston, 1997)). This was the case with <S1>.

Q2. To what extent did the use of computer-based multimedia resources influence your attitudes towards the subject?

Most students (N=10) judged that the use of multimedia favourably influenced their attitudes towards the course, a few (N=3) were neutral ('I would have studied the subject anyway. I am not a big computer fan') and one negative $\langle S1 \rangle$.

Q3. Can you suggest improvements that could be made to the physical presentation of lectures (e.g. lighting, screen clarity, sound, room size, etc.)?

The question aimed to elicit students' comments on various aspects of the physical presence of lectures which concerned the researchers. Overall it appears that students were more tolerant than would have been expected. Two complained about the occasional flickering of the screen, two about the necessity of having dimmed lights; except for one exception, they considered that the larger than necessary capacity of the lecture theatre was not problematic. Two felt that sometimes the "technology got in the way" (i.e. created a distance) and did not make the interaction between the teacher and the class as easy as it would have been if the lecture had been delivered more conventionally.

In conclusion: Student attitudes towards educational technology in the classroom were overwhelmingly favourable. In some cases, this positive attitude was accompanied by enthusiasm, but an instrumentalist reaction was much more the norm. In general, students felt that like it or not, they had to adapt to the fact that teaching and learning were bound to become increasingly computer-based.

Evaluation 2: Out-of-class usage

Expertise with, and attitudes to, computers

Without exception, all students had access to computers outside of class, either through personal computers at home or in the Language Centre. Although the CD-ROM programme is a dual platform (Mac/Windows), students used only the Windows (3.1/95) version.

Before dealing with specific questions of out-of-class usage, it is worthwhile to consider the issue of the level of students* expertise with computers and their attitudes towards the private use of educational technology. Individual computer competence varied widely from those who were very conversant with computer operating systems to those who were not even able to tell us any details of the kind of computer they used, with most students tending towards the lower end of the spectrum of computer literacy. Here too the prevailing attitude towards computers could best be described as an instrumentalist, i.e. they are tools to be used rather than objects of interest in themselves. There was no particular fascination for the CD-ROM as a CD-ROM. And as some students said, the CD-ROM is different from textbooks and reference books, it complements them rather than replaces them.

Analysis of students' responses

Q4. Are you using the CD-ROM a) at home? b) in the lab?

Q5. If not at home, why?

Q6. If at home, what kind of computer do you have? what operating system?

Table 1: Where is the CD-ROM used?				
Home	Computer laboratory	Neither		
9	9	1		

Note: Some students used the CD-ROM at both locations. The reasons given for not using the CD-ROM at home were:

- the lack of expertise/confidence with technology: (N=2)
- not having a computer at home: (N=1)
- owing an insufficiently powerful computer: (N=2)

We cannot expect therefore that all students will be willing or equipped to use the CD-ROM at home.

Q7. Was the handout accompanying the CD-ROM useful in installing and/or running the program?

As the CD-ROM is still a prototype, its installation "though not difficult" is not entirely straightforward and requires some guidance. A handout was thus given to the students to help them and we wanted to know how they had managed the installation. The results were as follows:

Successful installation, the handout was clear: N=3

Successful installation, the handout was clear (but someone else did it for me): N=1 Successful installation, the handout was not necessary: N=2

Successful installation, but the handout was insufficient for me to perform the installation myself, at my first attempt: N=3 (Students went to a friend, a member of their family, or their lecturer for help.)

Q8. What is your pattern of usage (e.g. how often do you use it? for class preparation? to review lectures? did you use it to prepare for the mid-term test?

The patterns of usage were as follows:

Table 2: Patterns of usage of the CD-ROM			
Exam preparation	8		
Homework (e.g. phonetics exercises) *	7		
Explore everything that was on the CD-ROM 3			
Find information that I missed in class	1		
Revise lectures after class	2		
Prepare the topic of the next lecture	1		
Prepare my project**	1		

Notes:

* Students had also in their possession an audiotape which included all the texts and exercises essential for the course. This could be considered as a back-up for those who were not at ease with the CD-ROM.

** This applies only to third-year students.

The results above indicate utilitarian exploitation of the instrument. Students had recourse to it when they were required to, for their homework, or when they deemed it essential (i.e. be ready for the test). At the time of the interviews (beginning of the second half of the course), therefore, few students had explored all the features of the CD-ROM

or used it as a resource to independently expand their knowledge to varieties of French other than the ones directly studied in class. From the students' comments, it was possible to gain an idea of the frequency of use of the CD-ROM.

Table 3: Frequency of use of the CD-ROM				
Regularly	7			
Irregularly	4			
Once	2			
None	1			

Q9. What do you like best about the CD-ROM?

Students generally mentioned between one and three features or functions.

Table 4: What do you like best about the CD-ROM?Features of multimediaTotal: 12 mentions- pictures2- ('talking') maps6- videos2('you see the mouth moving, its easier to learnq		1
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When they answered this open question, students had to consider their experience with the CD-ROM globally, both as a teaching and learning instrument, for class and private use. The preferences they mentioned are equally shared between two areas: the multimedia features and the effectiveness of the product for learning —which is reassuring given the effort, time, and energy that the researchers and team have put in conceiving and implementing the components of the CD-ROM. It should be noted that, if there was a motivational factor to the use of the CD-ROM, it is not what came first to

the minds of the respondents. Motivation appears more implicit than explicit (Compare with Brett, 1996), in line with the instrumentalist attitude observed above.

Q10. What do you like least about the CD-ROM?

Three students signalled that they had no major problem. Negative responses concentrated on three areas:

- The first had to do with computer performance: Speed was the main difficulty (how long it took to go from one component to the next) as well as insufficient memory causing the screen to freeze on students* home computers (N=6): 'sometimes it took ages to get the pictures'.
- The second was a general dislike of computers and/or the fact that, with a computer program as compared to a book, 'you can't get an overview, you can't see the whole thing and its difficult to read from the screen' <S1>, and as a result, it may make it hard to find the information you need (N=2).
- The last comment (N=3) was related to a specific aspect of the program already discussed above, i.e. the fact that lectures notes are given only in point form. The three students would have liked them to be more detailed and discursive.

Evaluation 3: The hands-on session

The last part of the interviews was a hands-on session during which we attempted to gauge the familiarity students had with the CD-ROM. It was centred on the following questions and activities, in front of the screen.

Q11. Tell me what resources are available and how you access them.

Q12. Go to audio resources: show me what is there (how do you get sound, how do you scroll, etc.).

- Q13. Where are the lecture summaries?
- Q14. What is in the atlas? in the scrapbook? in the file cabinet? etc.
- Q15. What is behind the wall map? Show me how it works. What are the icons at the top?
- Q16. Where are the phonetics exercises?
- Q17. How about doing an exercise?

Student performance varied widely and showed a not unexpected relation with the responses given for Q8 (patterns of usage). The most adventurous students _the explorers_ were the ones who had the most thorough knowledge of the structure and working of the CD-ROM. The hands-on component of the interview was extremely formative, as its 'scaffolding' aspects (a collaboration of the expert/researcher/teacher and the learner, in the sense of Vygotsky (see for example Moll, 1990)) enriched the students' understanding of the instrument at their disposal and improved their manipulation of it. Informal remarks, as well as the end of semester questionnaire, seem to indicate that the use of the CD-ROM by students became more frequent and varied after the interview. We believe too that the interview had the effect of convincing the students that they were given special attention. The statement "The teaching staff were

helpful and showed an interest in the academic needs of students", on the final questionnaire, received overwhelmingly positive ratings.

Conclusion

The aim of our research was to collect empirical data on user evaluation of the Varieties of French CD-ROM. What was investigated was the initial attitudes and reactions of students after a few weeks of use. What was obtained was some preliminary indications on the usefulness and efficiency as perceived by students of

- a completely new way of delivering a content course in our language departments and
- an innovating tool aimed at facilitating self-study.

The Varieties of French CD-ROM evaluations have confirmed views that we had gained through previous experience in the use of computers in teaching language, but have also made us reflect on how to optimise from the start the level of satisfaction with the tool. In general terms, the following observations are of particular note:

a. Technology is best used if incorporated into subjects, the teaching of which it convincingly makes more efficient. Reviewing the characteristics of 'successful' technological innovations, in the epilogue to his article 'Implementing IT: pedagogy as the critical factor' (1997), Arnolds proposes the following as a first criterion:

"The degree to which technological innovation is perceived to offer those who use it a relative advantage over the system it supersedes. Is it significantly better than what you do now?" (p. 29)

In the case of the Varieties of French CD-ROM both staff and students concur that the management of, and access to, written/audio-visual data is superior.

b. The subject matter has to be attractive: multimedia by itself is not sufficient to motivate students. This was confirmed in student questionnaires last year at Melbourne University, and again this year at Monash. The introduction of multimedia in the classroom (and in the private study), though readily accepted, is not a decisive motivating factor. What counted most for our students was the fact that the course dealt with linguistics, with aspects language/history/society or that its content is taught in French, etc.

c. Introducing multimedia may bring solutions, but it also creates new problems, imposes adjustments in the curriculum and syllabus; in a word, it is disturbing for both the teacher and the learner. As Arnolds insightfully observes (1997),

"[...] one of the noticeable effects of introducing technology is not how it delivers the curriculum, but how it problematises the curriculum".

We experienced that effect while conceptualising and preparing the CD-ROM and progressively introducing multimedia into the classroom.

This year, our focus was on the use of multimedia as an essential instrument of teaching and learning. What the learners 'evaluations taught us, in particular, is that:

a. A majority of students are still uneasy with technology. Guidance from teachers is therefore needed not only in the process of learning the course content but also in the acquisition of computer skills. More specifically, this means that students' progress in the effective use of the CD-ROM needs to be monitored and that time normally devoted to the understanding of the course content needs to be displaced to the learning of technical skills.

b. Although most students accept changes in teaching delivery and welcome the enrichment provided by new educational tools, some refuse them. Differences in learning styles exist, and will continue to exist, and cannot be dismissed. Students with aversions to technology also deserve our attention and support, and need to be provided with learning tools that they prefer (e.g. the old audio/videotapes may have to be kept in the Language Centre, for example). It may be useful _through a self-assessment questionnaire, for example, to be aware from the beginning of the course of the cognitive and learning differences (see Jonassen & Grabowski, 1993; Morgan, 1997) in the student population enrolled in the class.

* This paper is based on a presentation given at the WorldCALL Conference, The University of Melbourne, July 13-17, 1998.

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APPENDIX 1

Main features of the Varietes de francais program

The program operates on two platforms, Macintosh and Windows, using Oracle Multimedia Objects.

The CD-ROM has two major characteristics:

a) it is a

database system, allowing storage and retrieval. It is object-oriented: users are introduced to the program through an interface, for which the metaphor of a study was adopted; the interface animation presents a room with a desk, shelves, file cabinet, etc., all of which are functional icons which take users to the different components of the CD-ROM.

The user interface gives free access to the particular resources which students or instructors wish to consult and allows them to view these data. The data are grouped according to types and stored in icon-designated files.

- A wall map of the Francophone world allows the display of regional submaps narrowing down the selection by successively descending from more general maps to more specific submaps. Recorded texts (audio & video) are linked to the maps to illustrate the particular speech of this geographical area.
- An atlas gives immediate access to individual maps.
- A video shelf displays a collection of videoclips.
- An audio rack gives access to sound recordings.
- A scrapbook includes all images other than maps: graphics, photos, posters, comic strips, etc.
- A linguistics reference book contains definitions of general linguistic and sociolinguistic metalanguage; it also provides the basic background in phonetics which is required to appreciate accentual differences.
- Various written documents are stored in the file cabinet: historical documents, legal texts, chronologies, excerpts from literary texts, etc.).
- A workbook contains interactive exercises (e.g. phonetics exercises, listening and reading comprehension exercises).
- A lectures handbook stores the collection of prepared lecture overheads and is available to students for their revisions.

b) it is a multimedia system

capable of combining —simultaneously or sequentially—still or motion images, speech, and written texts; it thus engages in the learner three perceptual modes of information processing —visual, aural, textual— operating individually or in association with each other.

APPENDIX 2

Multimedia Classroom and CD-ROM Usage

Evaluation Interview and Representative Responses

A. TEACHING: Use of the CD-ROM in the classroom

Q1. To what extent did the use of computer-based multimedia resources facilitate your understanding of the lectures?

I can't concentrate on two things at the same time: listen and copy - I have to do one or the other. It's important to see the lecturer create things on the blackboard. <S1> I quite like the use of it, especially projections, it just makes it more interesting. When you see the key points written up there, it is easier to understand, you can hear words and see them as well, so even if you have missed the word, you can still get the meaning of it. I thought it was a good way of teaching a French subject, quite different from what I've experienced before. <S2>

I think that it makes the class more interesting, instead of just standing there and droning on. It provides points of reference and so on. If it was a chalkboard lecture, that would waste time. There is a lot more information provided in the class. It's interesting. I like it, anyway. It provides some stimuli. I think it's fantastic that the course was taught in French. <S7>

I like to be able to return to the screen, if I don't understand what you are talking about. My visual memory is better than oral. I like it, I really enjoy it. <S8> It was quite useful in the sense that I could listen to different accents. The CD ROM was quick and easy compared to the tapes. Then, there is a lot of information in the maps, you just click on them. <S9>

I guess it helps because it is easier to understand and concentrate in class. <S10> Yes I definitely thought it made it very clear and set it out in distinct points, which obviously weren't like the full detail, but [the lecturer] was able to go on and expand on each point. And the maps were also very useful. It does help, gives you a point of reference. Sometimes, it's good to look at the screen and see what the talk is about. <S13> I think it helps me a lot, with my understanding and speaking French and with all sort of things. If I don't pick up a word, I can see it on the screen. <S14>

Q2. To what extent did the use of computer-based multimedia resources influence your attitudes towards the subject?

Q3. Can you suggest improvements that could be made to the physical presentation of lectures (eg lighting, screen clarity, sound, room size, etc.)?

You don't notice that it's a larger room, because there's only a small area used, so you can talk to other people. The only barrier for me was the language, but it wasn't the fault of the multimedia. $\langle S5 \rangle$

I don't think there is a problem of technology getting between teacher and students or between students. It's a bit different, but I wouldn't see it as a problem. <S3>

I think that may be slightly "probl_matique" if the teacher is always up on a podium. The computer is useful when you are lecturing, but not when you are trying to discuss things. <S11>

B. LEARNING: Private use of the CD-ROM

Q4. Are you using the CD-ROM a) at home? b) in the lab?

Q5. If not at home, why?

Q6. If at home, what kind of computer do you have? what operating system?

Q7. Was the handout accompanying the CD-ROM useful in installing and/or running the program?

Q8. What is your pattern of usage (eg how often do you use it? for class preparation? to review lectures? Did you use it to prepare for the mid-term test?

Q9. What do you like best about the CD-ROM?

Q10. What do you like least?

C. LEARNING: In front of the computer

Q11. Tell me what resources are available and how you access them.

Q12. Go to audio resources: show me what is there (how do you get sound, how do you scroll, etc.).

Q13. Where are the lecture summaries?

Q14. What is in the atlas? in the scrapbook? in the file cabinet?

Q15. What is behind the wall map? Show me how it works. What are the icons at the top?

Q16. Where are the phonetics exercises?

Q17. How about doing an exercise?