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# Students and ICT: an analysis of student reaction to the use of computer technology in language learning

David Barr  
University of Ulster

## Abstract

This paper discusses the reaction of students in three universities to the use of information and communications technology (ICT) in their language learning experience. Although the findings apply to the language-learning context, there are more generic implications for the wider area of computer enhanced learning. The study uses qualitative and quantitative data collected as part of a doctoral investigation into computer-based language-learning environments. The paper considers one main research question: are students resistant, radical or reluctant users of the technology, and why? It examines how and why students use the Web, e-mail and CALL packages to enhance their learning. This study shows that students are generally not unsympathetic towards it, although some of the factors that affect the level of student use of the technology, such as course relevance and access of computers, are often outside their control.

## Introduction

Much research into the use of ICT has highlighted the need for developments in this area to be driven by pedagogy, not technology. Recent investigations into the reaction of faculty (Gillespie & Barr, 2002 and Lam, 2000, 389 - 420) discovered that they are more likely and willing to use computer technology in the teaching process when they see clear pedagogical benefits for using it. Gillespie and McKee (1999, 38 - 46) suggest three types of reasons that cause student resistance towards the use of ICT: social and psychological factors, aspects of the computing environment, and educational reasons. That paper cited computer literacy and adequate facilities as major factors influencing student reaction towards ICT. Cuban argues, however, that students are more computer literate than before (2001, 163). In addition, he cites the example of Silicon Valley, where good access to computer resources did not guarantee

widespread use among students in schools and universities in that area. Cuban also argued that teachers needed to make more of an effort to integrate computer technology into what they taught (2001, 164). Both studies tested student reaction within a limited environment (particular school, university or area), this current study examines student reaction across a more widespread sample, using data from three different universities: two in Europe and one in North America.

In addition, this article will also further test Gillespie and Barr's taxonomy of reaction to CALL and ICT (2002, 121). That article suggested that languages faculty fall into one of three categories – those who were irrevocably opposed to the use of computers (the resistants); those unlikely to use it unless right conditions were met (the reluctants) and those who were enthusiastic adopters of ICT (the radicals). This study will consider how this taxonomy might be applied to students of modern languages.

## Methodology

My study examines student reaction in three separate institutions: the Universities of Ulster, Cambridge and Toronto. In doing so, it considers whether or not students generally oppose the use of computer technology in their learning. Data has been collected from 218 questionnaires administered to students in each institution between February and April 2001, in addition to discussions with focus groups and qualitative analysis from research trips to each university. An example of the questionnaires used can be found in Appendix 1. In Cambridge, the number of respondents was 82, in Toronto it was 64 and in Ulster it was 72. The reaction of students towards the use of computer technology in teaching and learning will be evaluated in three main areas: the use of the World Wide Web, electronic communication (e-mail) and CALL (Computer-Assisted Language-Learning) packages.

Each university is very different in character and computer technology is used by students in different ways in each case. The smallest of all three universities for language studies, the University of Ulster, has approximately 400 students within Languages, while Cambridge has over 800 students in the School of Modern and Medieval Languages (MML). Toronto is the largest institution in the study with over 6000 language students on two main campuses. One established university from the UK was chosen (Cambridge), as well as one of the newer universities (Ulster). This choice is intended to represent the

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wide diversity of reaction and provision of electronic language learning facilities that currently exists, not just in Britain, but also in Europe at large. Toronto, with a strong interest in the use of new technologies, was chosen as an international benchmark.

## Student Use of ICT

### The World Wide Web

The Web offers a vast bank of materials useful for language learning: Haworth divides the resources into uni-directional and bi-directional material (1996, 174). Uni-directional is essentially read-only resources such as newspapers, texts and reference material, while bi-directional material allows the user to interact with it: examples of such material include online exercises and tests. In all three institutions examined, both categories of resources were used by students.

### At Ulster

In this institution, the Web was found to play a major role in research: 82% of respondents used it for this purpose. The types of research carried out on the Web varied from searching for material for presentations and essays on geo-political aspects of contemporary life in the target language regions, to detailed research for fourth year dissertations. Students used a variety of Web resources including academic papers and commentaries, journal articles, political party Websites, and regional tourism Websites. Area studies, or contemporary target language civilisation is a very important aspect of many language courses at Ulster with almost half of the programmes being dedicated to this area of study. One crucial factor in making the Web an important study tool for students is its flexibility. Students can access the Web at any time or from any location. The need for flexible access to resources has become an increasingly important issue for students who either commute to university everyday or need to work part-time to fund their studies. This means that students often end up working on essays or other assignments at times when it is not practical to be on campus.

In addition, members of faculty often advise students through course documents as well as on reading lists and in conversation, to use online grammar tests, listen to radio and television stations online and read target language newspapers in their own time to develop their linguistic skills. Although the percentage of students who used the Web for these purposes in their own free time was not very large (40%), it seems likely that the number would have been lower if students if these resources

were not Web-based. The flexibility of the Web is clearly an attraction as it means that students can access resources and facilities at times and in locations convenient and suitable to them. The issue of encouraging more students to use study resources in their own time, though, is unlikely to be addressed by simply providing flexible access to the material. Instead, we need to look at how to motivate students to want to use these resources and to appreciate the linguistic benefit that self-directed learning can bring.

### **At Cambridge**

The results of the survey show similar use of the Web in Cambridge. There is, however, one important difference. A much smaller percentage used the Web for researching for essays and presentations (54%). One reason that might explain the more limited use of the Web in this institution is that of perceived relevance. Many of the students and faculty who took part in the survey for this investigation were involved in courses of study in literature and linguistics, rather than area studies. They believed that the Web was mainly useful for researching information on aspects of contemporary culture and life in the target language culture rather than for areas like literary criticism. This finding suggests that students are pragmatists when it comes to using computer resources: they use facilities when it clearly relevant to do so.

### **At Toronto**

The level of pedagogical relevance of the Web at this university is similar to that at Ulster, with the Web clearly being used as a very important research tool for essays and presentation. 73% of respondents (N=64) use the Web regularly for researching material on contemporary geo- and socio-political aspects of life in the target language countries. Some programmes of study in Toronto require students to complete assignments using entirely Web-based sources of reference, such as online journals and papers. Using the Web extensively for researching coursework topics can be problematic, however. In Toronto, it has led to over-reliance on the Web and under-reliance on traditional sources of reference, such as library books. A French tutor at Toronto indicated that if material was not available on the Web, some of his students simply would not search for it in other sources and, on several occasions, they complained about being unable to complete coursework assignments because reference material was not readily available on the Web.

Students at Toronto, though, are not enthusiastically using the Web all the time. 27% used the Web in their free time to read the target language, complete online grammar and vocabulary exercises and listen to radio or television broadcasts. These findings support the view that pedagogical relevance drives student interest. Whereas the Web has changed study patterns in the area of research and essay preparation, it has not made a major impact in the area of self-directed learning, as there are not droves of students engaging in such as activities as independent grammar, aural and reading practice through the Web

## E-mail

### At Ulster

Until recently, use of e-mail by students at the University of Ulster was limited because many students used another form of electronic communication, FirstClass, the computer conferencing package from Softarc, (Gillespie, 2000, 24 – 25). This set of applications allowed students, in addition to contacting faculty with studies-related queries, to submit coursework such as essays, presentations and dissertation drafts. Furthermore, some faculty would use the system to return corrected work and send lecture notes and other handouts. FirstClass was used for these purposes in preference to e-mail for technical reasons. The e-mail system was traditionally less reliable because of compatibility problems with Mac and PC platforms. FirstClass also provided a more user-friendly interface for such tasks as attaching documents, typing accented characters and general usability.

The preference towards FirstClass helps to explain why 36% communicated with faculty members using e-mail, while 21% and 38% respectively used e-mail to send and receive coursework. This percentage cannot be attributed to a lack of familiarity with e-mail as 85% of respondents at Ulster used e-mail outside their studies, for communicating with friends and family for example. This usage shows that familiarity with computer packages does not necessarily mean that students will use them. They know, for example, that they needed to use FirstClass rather than e-mail to access information pertaining to their courses. In other words, the use of FirstClass was mandatory: if students did not use it, they knew that they would lose out on informational and communicative opportunities — such was not the case with e-mail.

### **At Toronto**

In Toronto, a similar pattern emerges: students were very familiar with using e-mail outside their studies (86% used it to communicate with friends and family), although only 59% of student respondents at this institution used e-mail to communicate with faculty on matters relevant to their courses such as explaining absences and seeking advice from tutors. There are two plausible explanations for this limited use of e-mail for course matters:

- a. Until recently, the allocation of e-mail accounts was not always systematic and this made it very difficult for faculty staff to obtain the e-mail details from their students. In other words, faculty members would not use e-mail for such tasks as sending messages relating to the administration of their classes (such as details of re-scheduled classes, assignments details and other related information) as they could not be guaranteed that all their students would get the information.
- b. Secondly, course websites are the main vehicle of delivery for lecture notes and handouts and class administration details.

### **At Cambridge**

Unlike the other two institutions, students from Cambridge are prolific users of e-mail. Electronic communication is a way of life for language students in the course of their studies. With students based in 31 colleges across the city, fast and efficient communication is a necessity and, as a result, students use e-mail to check details of class schedules and assignment requirements and solicit general advice from their professors. The study found that 74% of students used e-mail for this purpose. Nevertheless, e-mail is not an essential part of all aspects of academic life for students: 16% of them, for example, e-mailed coursework to their professors. The principal reason for this is that students are encouraged to submit handwritten assignments in many of their language classes. The argument for doing this is that it encourages students to think differently when preparing essays and other assignments. Members of faculty at Cambridge believe that since part of students' end-of-term examinations involve timed essays, handwritten assignments are good preparation for those exams, since handwritten work requires students to plan their work more methodically before starting to draft it than when word processing, as editing is less rapid with pen and paper.

### **At Ulster**

The use of CALL packages at this institution is developing. Two

## Computer-Assisted Language Learning (CALL) Packages

CALL programs using HyperCard were produced by the University in the late 1980s and employed in undergraduate language programmes. These were TAP and MetaText, used in textual analysis and translation classes for second year students of French. Both packages allowed students to build interactive banks of grammar and vocabulary in Hypercard stacks. MetaText, in particular, was used as an electronic translation notebook, where students completed weekly translation assignments on the Hypercard stack and sent them to their tutor electronically. The TAP package was very similar but also offered additional features like word counts and prompts that help students to analyse a range of French texts. These packages were only available on a Mac platform and with the University's conversion to a PC environment, these packages are no longer used. Until recently, no other CALL package was used on a regular basis at Ulster and it is therefore not surprising that the survey showed that few students had any experience of using CALL (11%).

### At Cambridge

In Cambridge, a much wider bank of CALL packages is available to students. There are packages for twelve languages, including grammar exercises and notes (GramEx and GramDef, for example), pronunciation drills and a video comprehension package called Video+. In addition, TransIT Tiger, a Hypercard based package. Using this shell, translation exercises are created with hyperlinks offering hints, cultural references, links to glossaries and examples of mistakes made by other students. The texts are usually previous translation examinations. During the 2001/02 academic year, some faculty staff used these banks of translations in class, requiring their students to complete the translations on screen and, in some cases, asked their students to e-mail them their work.

With wider range of CALL resources available, it is not surprising that a higher percentage of students used CALL (46%) in Cambridge. The largest group of respondents who used CALL packages was first-year students (21 out of the 38 respondents), with only 2 out of 38 being in final year. A number of reasons explain this trend. Firstly, all first-years have weekly classes in grammar and other language work whose curricula lend themselves easily to the use of certain CALL practice exercises. Final-years do not have these classes: in other words, CALL does not fit their final-year curriculum. In addition, the level of CALL resources provided at Cambridge is constantly evolving. When this group of fourth-year students were starting

to study at Cambridge, the CALL Facility had only been open one year and the number of packages available was limited. By the time this survey was conducted, the students who had CALL classes (mainly those in first year) were given access to more resources than ever before. The group of final-years had no need to use CALL and therefore were not aware of all the software available to them.

The pattern of CALL usage was also interesting. 47% of those who used CALL packages did so at examination time. There are two main reasons for this:

- a. Some of the CALL resources, such as the translation exercises on TransIT Tiger were essentially past examination papers and therefore completing these exercises was good examination review.
- b. Courses at Cambridge tend to be predominantly examination-focused with very little formal assessment throughout the term: most term-time assignments are generally practice exercises and are not counted in overall marks. Since many students tend to be strategic learners and organise their learning specifically to obtain a high grade (Fry, Ketteridge and Marshall, 1999, 30), the use of CALL packages for language practice and development is restricted to the time of year when it is most relevant – near examination time.

There is also a significant correlation between CALL use and the numbers of faculty who employ it in class. In Cambridge, 38% of tutors (N=42) used CALL packages in class, compared to 8% (N=13) in Ulster. Although there is a wide range of commercially produced and downloaded language-learning packages, students are unwilling to go looking for these unless they are told what to look for or they are required to use it in class. In the same way, it is normally only the most highly motivated of undergraduate students who look beyond the lists of required texts when looking for books to read in connection with their studies.

#### **At Toronto**

CALL application resources are limited at Toronto: Web-based material is more common. In fact, before faculty and student questionnaires were administered, it was decided, upon recommendation from departmental faculty, to avoid using the term 'CALL programs' in questionnaires because it would seem alien to many of the respondents. The main packages



used are spelling and grammar checkers such as Le Correcteur 101 (French) and Errata Corrige 2.5 (Italian). Students were required to use these checkers on their language assignments before submitting them and more stringent marking criteria, which penalised simple spelling and typographical errors, would be used to encourage students to use the checkers.

A total of four respondents (6.25% of those who completed the questionnaire) used CALL. It emerged that one of the main reasons why students do not use CALL is that they do not have good access. In discussions with students, it was clear that they can use CALL software only at certain times of the day when a supervisor is present (these are known as OTAS or "Open to all students" sessions) because of security implications. These OTAS sessions are often limited because the labs are heavily booked for mainstream teaching each week. At most, the labs are available for OTAS sessions between four to six hours per week.

The factors that affect student use of computer technology are varied, as outlined above. These can be divided into main three categories: psychological, infrastructural and educational.

## Discussion: types of resistance

### Psychological factors

Students are increasingly familiar with computers: levels of computer literacy are on the increase in primary and secondary education (Cuban, 2001, 163), leading to more technologically-literate students in universities. Often, however, students are not familiar with the pedagogical relevance of computer technology. Felix (1999, 31) and Bel and Ingraham (1997, 108) point out that whereas the Web offers a wide variety of resources that are highly relevant to the language learner, students often do not know how to access these effectively and therefore need to be guided by their teachers. These findings support those of Gillespie and McKee, who discovered that students feel insecure when using computers for language learning and seek reassuring guidance from faculty (1999, 41).

If students are not shown by faculty which resources and facilities are available to them, they may resist using technology through ignorance. If students are not aware what computer-based resources are available to them, it can hardly be surprising that some come to the erroneous conclusion that the computer has little value in language learning. When students were

asked in their questionnaires whether they felt the computer was beneficial or disadvantageous to their language learning, some of their comments included: "Never knew that there were language programs available...there aren't a lot of language packages available." Another student wrote: "No, because it encourages you to rely on the computer instead of using a dictionary". These types of comments indicate that a lack of understanding of the pedagogical value of computer technology has led some students to feel the computer offers them little benefit.

## Infrastructural factors

### Access to computers

Students at the three institutions studied described access to computers as problematic. As more students divide their lives between study and paid work (to fund their education), students demand flexible access to resources (Elkabas et al, 1999, 243). Consequently, students must often study in the evening and if they are expected to use computers, they require access to computers at those times. At Toronto, the limited availability of OTAS sessions means that this is not possible. At Cambridge too, students are not able to use the multimedia CALL Facility in the evening because it is closed. Although until recently there was no CALL Facility at Ulster, a similar problem was encountered by students there. Many students remarked in their surveys that they found it difficult to access the general-purpose computer labs to print off notes or access resources because these labs were heavily used and students were required to queue for lengthy periods to use computers.

This inevitably causes frustration among students and there is a real danger that this might become a major source of discouragement for students, even causing resistance: a view supported by Esch and Zähler (2000, 12). If institutions want to encourage students to use computer technology more often, there needs to be a suitable infrastructure in place that will ensure that students can depend on the technology and use it when they need to. Such an infrastructure might involve providing students with swipe cards to ensure the security of labs (which was a major problem in Toronto, where labs are located across the city) and also allow students access to the computing facilities at times they find convenient.

### Student Isolation

In Cambridge and Toronto, there are extensive multimedia computer facilities, offering students a wide range of language-

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learning software and facilities. Students, however, do not see the labs as central to their learning environment.

In Toronto, the multimedia labs in the main Downtown campus are located in quite remote areas of the campus. In the same way, the CALL labs in Cambridge are located within the Raised Faculty Building in an area that is not a main thoroughfare for most students. As a result, this has led to a common perception among students that they need to make a special effort to visit the multimedia labs. They generally do not just pop in for a casual visit. Recognising the need to locate CALL facilities within a more socially working area, the University of Toronto has recently opened a new self-access multimedia lab within one of the University libraries. There are also plans for a similar venture at Cambridge. At Ulster, new multimedia labs are currently being developed on two campuses and although it is too early to effectively evaluate their use, they are both located in central areas, near the self-access language-learning rooms and all other main facilities like the library and refectories.

The labs at Toronto and Cambridge offer limited generic software and printing facilities to students. This means that students can only use the facilities for language learning activities and have little opportunity to type up or print out essays, for example. The reason for this is quite clear – lab administrators do not want to turn these labs into general computing facilities. If this happened, it could lead to vast numbers of students from all faculties in the university using the facilities for generic tasks, which would deprive language students who want to use specialised software from doing so. The counterargument for this is that if language students are attracted to these types of labs because of the availability of generic computing facilities, they are likely to come back repeatedly. Furthermore, the more they use these labs, the more chance there is that they will begin to explore some of the specialist CALL software.

## **Educational factors**

### **Commitment to self-directed learning**

Students do not always make the most of the learning opportunities afforded to them by computer technology, especially when it comes to self-directed learning. The use of CALL for independent study is a good example. In all cases, few students engaged in this form of self-directed study. These figures do not mean that students are opposed to using CALL. Many students at Cambridge remarked that they did not have

the time to use CALL resources as part of their independent study. This indicates a more widespread problem: students are often reluctant to dedicate considerable amounts of their limited spare time to independent learning tasks unless there is a clear incentive to do so, such as coursework marks or other form of assessment.

### **Course relevance**

Incompatibility with the modern languages curriculum has been blamed for student resistance (Gillespie 1995, 154). Students are willing to use computer resources when they see it as relevant to their learning situation: this is why the Web is used more extensively for research at Ulster and Toronto than at Cambridge. The vast amount of up-to-date information on contemporary civilisation and other areas of the language curriculum at Toronto and Ulster mean that the Web is seen as particularly relevant and suited to the pedagogical requirements of both institutions. When asked what difference computer technology made to their learning, many students at Ulster and Toronto students cited such advantages as ready access to on-line newspapers and cultural and political information for essay research.

In addition to actual relevance, the perceived relevance of computer technology also affects how and when it is used. The use of the Web for research at Cambridge, for example, is slightly lower than in other institutions because of a general perception among students that the Web is not as useful for researching information on areas of study in the curriculum, such as literature. Furthermore, many students also remarked that it was not essential to use computer technology to complete the types of languages degrees available there. Whether these comments are accurate or not, they show that the perceived benefit brought by computer technology is often just as influential in encouraging or discouraging its use in learning as the actual benefit it brings.

### **Development of a learning culture**

The more technology is integrated into the everyday learning experience of students, the easier it is for technology to become accepted as the norm. This supports Helen Hasan's claims in her discussion on the importance of electronic communication. She posits that students accept whatever form of communication is presented to them as "the standard" (1991, 267). Her argument suggests that even those students reluctant to use computer

**What factors can overcome resistance?**

technology will comply with the majority and use it if that is promulgated as the norm. Evidence of an e-culture can be seen at the Universities of Ulster and Toronto, which use a comprehensive electronic student information system. This system gives students access to examination results, timetables and enrolment details. Furthermore, extensive electronic library facilities are available, often allowing access to library resources and reference material on and off-campus. As a result of these initiatives, students need to use computers on a regular basis for everyday tasks within the university environment.

### **Focused training**

It is clear that students need to be shown exactly what is available to them. Probably the best trainers are their instructors, who know the exact requirements and objectives of the curriculum they teach. Training might take the form of dedicated training sessions or simple guidance in class on an ad hoc basis. Questionnaire results from the three universities studied suggest that this training does not happen reliably.

### **Time**

Increasingly, students find themselves with very limited spare time outside class. As a result, many cannot afford to spend vast amounts of time using computer technology to enhance their language learning unless they know it is a compulsory part of their language course. These time constraints look to continue and it seems inevitable that courses will need to be restructured to give students more time for their learning outside class contact hours. Until students have more time to spare outside classes, it looks likely that they will not explore the pedagogical advantages of computer technology; not because they are openly resistant, but rather because they see it as impractical.

### **Evidence of pedagogical benefit**

If students are clearly convinced that computer technology will help them obtain better marks, though, the chances that they will use these facilities are increased. One way of gently persuading students to associate using the technology with good marks might be to design a course evaluation system that rewards students for using CALL in independent study. Developing a learner portfolio, where students need to include evidence of meaningful and relevant use of CALL or Web-based language exercises is one possibility. In the portfolio, students would be asked to demonstrate that they have made improvements in aspects of their language learning, evidenced

by print-outs of exercises they have completed or score sheets showing that students have successfully engaged with the programs and packages over a sustained period.

The findings of this paper lead us to make the following analyses of student reactions to the use of ICT:

## Resistants, reluctants or radicals?

1. The Students observed are not radicals. Few students are likely to explore the pedagogical benefits of computer technology on their own initiative. They are often dependent on direction from faculty. This seems to contradict the common view that students are always ahead of faculty in their use of computers.

2. At the same time, students are not resistants, irrevocably opposed to the use of computer technology. There was no evidence of technophobia at any of the institutions studied. Some, though not all, of the primary causes affecting the level of student use of technology are beyond their control, such as course relevance and technical issues. As a result, we must assume that any resistance from students is more passive than active.

3. Many students tend to fall into the category of reluctant or pragmatic adopters. They will use the technology when a number of key conditions are met:

- a. The technology offers clear pedagogical benefit or course credit
- b. They are shown what resources and material are available to them
- c. Computers are part of the learning culture

Students, therefore, use computer technology when it is practical and advantageous to do so. The findings of our investigation into faculty resistance (Gillespie and Barr 2002, 131) discovered that language faculty fell into the same group – reluctant as opposed to staunch opponents.

We can conclude, therefore, that students are reluctant adopters of technology. Their attitudes are influenced by a number of factors beyond their control, such as access, knowledge of resources and the (perceived) pedagogical relevance of the use of ICT. The latter problem also plagued the earlier history of CALL programs in the mid-1980s (Jones, 1986). There are a

## Conclusion

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number of important lessons to be learned from the present study:

1. We need to make the technology fit the curriculum. In the UK, for example, some areas of language study seem to encourage the use of technology more than others. The areas of literary criticism and analysis do not appear to fit. That said, of course, the Web now contains a wealth of resources that are ideal for this area of study, including electronic manuscripts of texts, concordances, cultural notes and other tools that assist learners in this area. Increasingly, the question is not whether the Web fits the course but instead whether members of faculty are aware how the Web fits the course. Perhaps we need clearer "signposting" of resources on the Web: many institutions provide links pages for language-related Websites and these are certainly an excellent starting point for teachers looking to use these tools in their courses. Nevertheless, perhaps we need a much more extensive catalogue of resources that is regularly updated and maintained. After all, we have online bibliographical databases for books, journal articles and other materials held in libraries across the world. Given the increasing research relevance of the Web, such a resource would be an excellent tool for teachers and learners alike.

2. Technology does not always fit traditional course structures. Continuous assessment is still the best way to integrate computer technology in the learning process and to reward students for its use through valuable coursework marks. It is very difficult to introduce computer technology into courses that are almost entirely examination-oriented, such as those in Cambridge. Two or three hours spent using a CALL program to complete a translation task might seem, for the student at least, a lot of extra work for a task that ultimately is not going to be assessed and rewarded.

3. The problems of access to computers and integrating technology into the heart of the learning culture are being addressed over time. The Dearing Report into Higher Education in the UK recommended that every university should have at least one computer for every eight students by 2008, with the desired ratio being 1:5. In addition, systems like WebCT and Blackboard are now being used by some UK universities to provide students with an integrated learning platform, through which they can reserve books, obtain course notes and assignment details and even pay fees online. Nevertheless, even when these problems fade away, we still need to ensure

that the reasons for students using computers in their learning are greater than the reasons for not using the technology. ♦

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## Appendix

### STUDENT QUESTIONNAIRE

Please complete the following questions. The results will form part of a comparative study in the use of Information Technology in Language Learning.

1. Do you use any of the following computer applications for personal use? Please circle as appropriate and indicate how regularly you use them: 5= frequently/several times per day; 1= very rarely
  - a. Word Processing packages (MS Word/Works etc)
  - b. Spreadsheets (e.g. Excel etc)
  - c. WWW browsers (Netscape) Please explain below how you use the Web
  - d. Email
  - e. None of the above
  - f. Other Please specify
  
2. Do you use any of the following computer applications for university related tasks? Please circle as appropriate and

*indicate how regularly you use them: 5 = frequently/several times per day; 1 = very rarely*

- a. Word Processing packages (MS Word / Works etc)
- b. Spreadsheets (Excel etc)
- c. WWW browsers (Netscape)
- d. Email
- e. None of the above
- f. Other *Please specify*

\*\*\*\*The remaining questions relate to the use of the computer for university work\*\*\*\*

**3. How do you use email?** *Please circle as appropriate and indicate how regularly you use it in these ways: 5 = frequently/several times per day; 1 = very rarely*

- a. Communicating with other students on campus
- b. Communicating with friends at other universities
- c. Communicating with members of staff
- d. Receiving coursework from staff
- e. Sending coursework to staff
- f. None of the above
- g. Other *Please specify*

**4. How do you use the World Wide Web?** *Please circle as appropriate and indicate how regularly you use it in these ways: 5 = frequently/several times per day; 1 = very rarely*

- a. For communicating with staff/ students on campus or friends in other institutions
- b. Researching material for essays or other tasks
- c. Using online dictionaries
- d. Accessing target language material for self study (e.g. online newspapers, radio/TV stations)
- e. Using online language learning exercises
- f. None of the above
- g. Other *Please specify*

**5. Do you use CALL (Computer-Assisted Language Learning) programs?** *YES/NO If "Yes", please give details of CALL packages and whether you use them for class related activities or private study*

**6. How often do you use CALL packages?**

- a. Several Times per day

- b. Once per day
- c. Several times per week
- d. Once per week
- e. Near or during the examination period
- f. Other *Please specify*

**7. What do you think of the computing facilities within the School? *Please circle as appropriate***

- a. There are adequate facilities: we have good access to computers
- b. Facilities are not adequate and we have poor access
- c. The computers are compatible with each other
- d. All the computers are not compatible with each other
- e. We are well trained in the use of the facilities
- f. We are not well trained
- g. We have good support staff to solve technical problems
- h. There is inadequate technical support
- i. Additional comments. Please take a few moments to add comments here.

**8. Do you have access to the WWW, University e-mail etc from your room in residence/rented accommodation? *Please delete as appropriate. If you live at home during term-time, please write N/A beside this question***

YES/NO

**9. Do you have access to the WWW, University e-mail etc from your home? *Please delete as appropriate***

YES/NO

**10. Which of the following factors do you consider important for the use of computer technology to become an integral part of your university course. *Please indicate their importance (5: very important; 1: of no importance)***

- a. Reliable technology
- b. An adequate amount of computers, printers and network connections
- c. Suitable access to computing facilities (e.g. 24-hour access to machines and networks)
- d. Compatibility between staff and student computers
- e. Dedicated technical staff (or help line support)
- f. The use of computers by all teaching staff
- g. Other factors. Please state

**11. Do you consider that the computer is beneficial or disadvantageous to your language learning? Please mention programs/packages that you find particular helpful/useless and whether or not you feel that the computer motivates you in language learning.**

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*David Barr currently lectures in French at the University of Ulster. He has been a member of EUROCALL since 2000 and is now its UK national representative. One of his main interests is the creation of an integrated computer-based language-learning environment and in 2004, he published a book entitled "ICT - Integrating Computers in Teaching" (Peter Lang, Bern).*